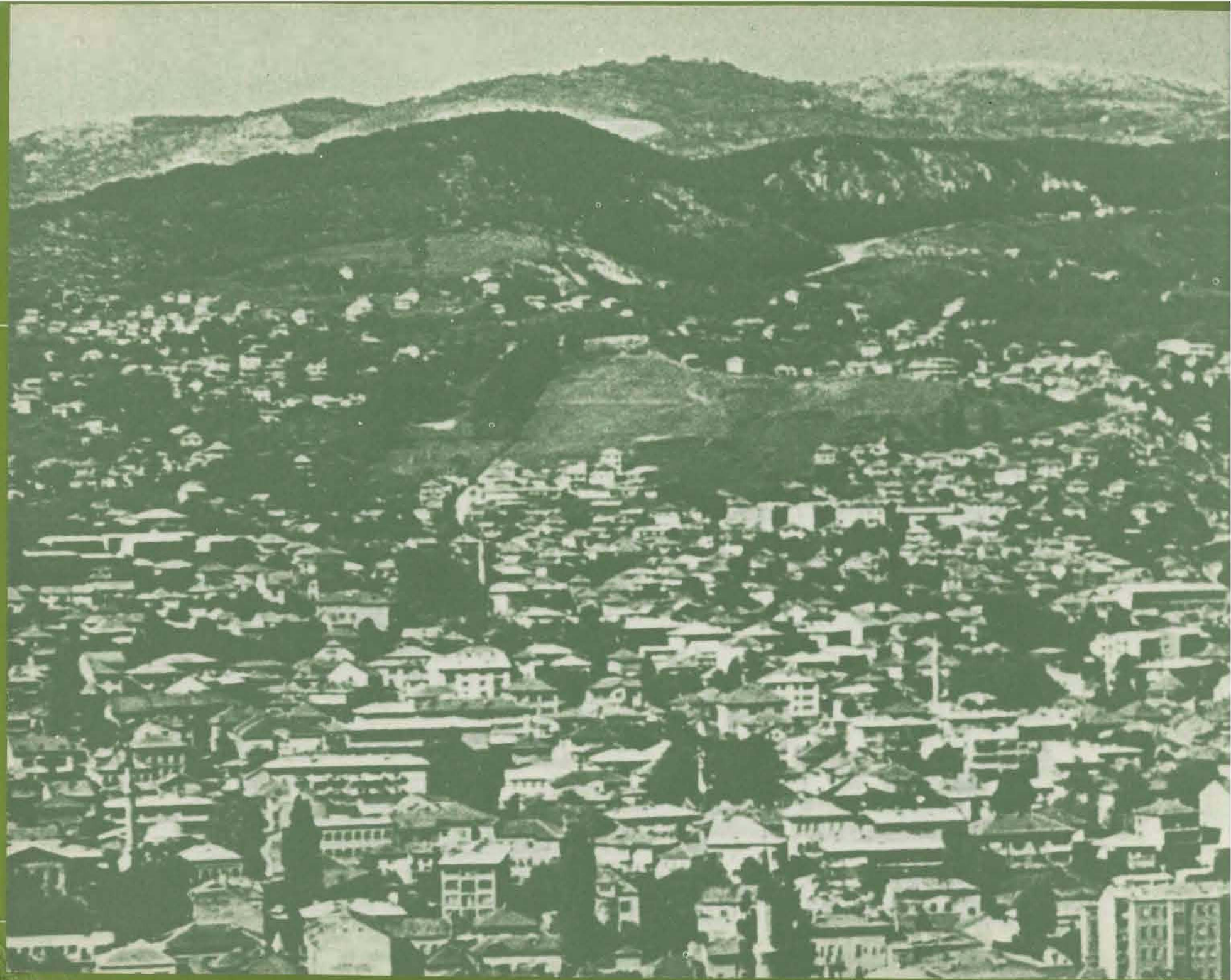


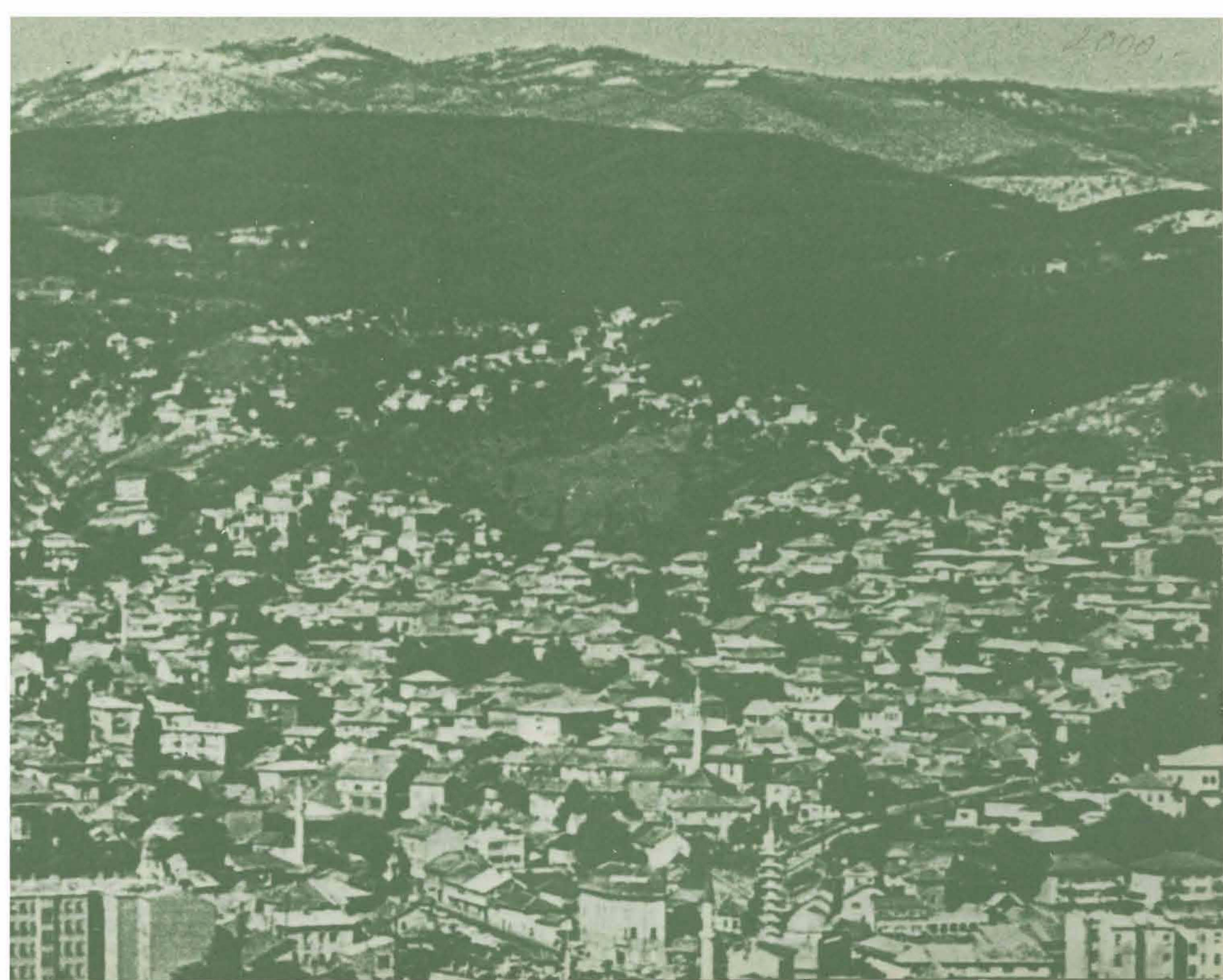
Dušan Grabrijan

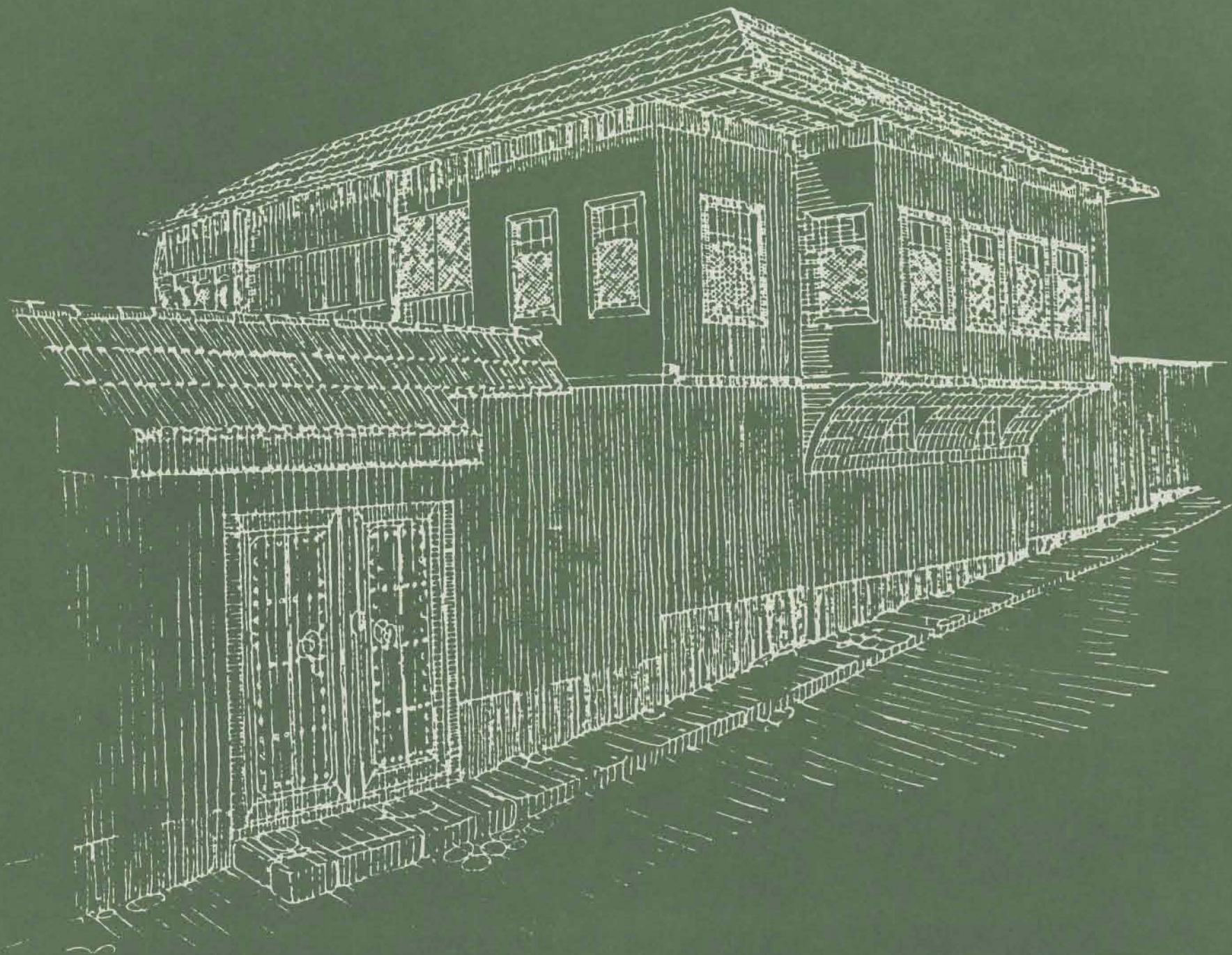
THE BOSNIAN ORIENTAL ARCHITECTURE IN SARAJEVO





2000.





Dušan Grabrijan

THE BOSNIAN ORIENTAL ARCHITECTURE IN SARAJEVO

with Special Reference to the Contemporary one



Dopisna delavska univerza
Univerzum

GRABRIJAN'S DRAFT OF THE FOREWORD TO THE SLOVENE EDITION

(written in the years
1951—52)

Why is the Bosnian Oriental architecture in Sarajevo connected with the contemporary one?

There is a part of the Orient, it can be said, in the heart of Europe, and this Orient is in our country — thus it is a part of our cultural heritage. Besides, this Orient is marvelously in touch with the modern trends of architecture, having been, for a long time already, fecundating the contemporary house — and why should we always receive at third hand what can be drawn from the source?

Why am I interested, first of all, in the house?

Because the question of a dwelling house presents the central problem of our era and because the house in the past was not developing in such a way as in the Orient. Shall I start, perhaps, with a Gothic castle, a Renaissance palace, a Baroque manor-house with all their monumental lumber. Namely, I do not know of a culture to tend to such an extent in offering the house to a wide layer of people, being able to attain such a compactness. Where else shall I look for a model but in a consistent culture?

And why in Sarajevo?

Simply for the reason that I had, during my 16-year stay in Sarajevo, the opportunity to get acquainted with it, to love and admire it.

I am well aware that my exploit is a hard one, being an initial and pioneer work, and for this reason it will be, probably, a defective one. And what has been done in this field up to the present? A few romantically enthusiastic descriptions, some colonisers' haughtiness, yet I could nowhere find a whole. And it could not be otherwise, it is true, as the house was, we can say, closed to a foreigner and it has not been, up to the present, an opportunity or need for such discussions.

In the present book there has been gathered some material, being but a small part of a vast Bosnian Oriental heritage. In the meantime lots of the monuments published in this book, have been destroyed, and the destruction of the rest is under way. Now, there are already some twenty instances of the classical Oriental architecture which do not exist any

more. After ten years however, the instances of the native Oriental architecture will be even more rare, and for this reason there have been included in this book such a number of snaps and photos — and for this reason the book has, already at present, a documentary character, and in particular so in regard to the Oriental house and to the Charshiya. The book has been written in the Slovene language to enable our specialists to get acquainted with this architecture, as, in spite of the fact that we all live under the same roof, we do not, in architecture, know and understand each other. Thus our conceptions are being completed and enriched. In the same, Bosnia too, should be acquainted with the trends of the Slovene architecture, this would lead to a mutual respect and confidence. With this study I wanted to give incentive for, and understanding of, the Oriental architecture in Bosnia and in the country as a whole.

This Slovene edition should be followed by the Serbo-Croatian version where many a thing could be supplemented and amended.

Through criticism and discussion my views could be crystallized — for this presents a huge and risky step which cannot remain without mistakes. The first, most difficult step has been made.

Only the Serbo-Croat version has been published in the book D. Grabrijan, J. Neidhardt, »The Architecture of Bosnia and the Way (Published by Državna založba Slovenije, Ljubljana, 1957, up to page 318).

The Slovene original is being first published now.

D. Grabrijan

PREFACE

Among the first three graduates from Plečnik's School (Dragotin Fatur, France Tomažič, Dušan Grabrijan) the first place was occupied by Grabrijan: after his initial attempts at the creating of architecture he enthusiastically gave himself up to theoretical work. His longstanding stay in Sarajevo directed him to the research into the traditional Bosnian architecture and thereabout he wrote a great number of texts gradually maturing to an ever more conclusive view of this set of problems.

The book *The Bosnian Oriental Architecture in Sarajevo* presents a work grown out of Grabrijan's enthusiasm and conviction of a great future of modern architecture. He saw its realization in a close link with the victorious development of technology, and in particular so if considered from the point of view of housing projects, with their contemporary hygienic and other technical achievements and also with new materials, procedures and constructions. However, he was instinctively aware that these novelties would never be quite successful if the centennial traditions of the popular architecture were not taken into consideration. In his opinion, our contemporary housing culture shall rely, first of all, upon the models offered by the Yugoslav tradition. Thus, this was the reason for his interest in the Bosnian house, for his study travels and for his research made into the Macedonian house, for his interest in the popular architecture in a broader European space in general. Grabrijan's argument was that the links between the traditional housing construction in the Balkans and the principles of the modern (functionalistic) movement are not only organic and logical, but also obliging ones, in particular so for the Yugoslavs. He was convinced, on the other hand, that the traditional housing models had been established to such an extent that they need, in an actual fact, only to be appropriately completed with the innovations presented by the contemporary civilization, and through this linking they would offer directly ideal dwellings. There is another question why the development followed another direction, enacting a type of house thereby denying completely the old one, both from the formal and functional aspect. Anyway, Grabrijan's book manifests, no doubt, the ideals of the period when it was being written and this presents undoubtedly its

historical value. In addition to this value the book possesses other values as well, being, considering the ideas and ideologies of his period, of a more lasting character. They are the accurate analyses of the individual buildings, of their constructions, functions, furniture, environmental values, and the like. He made a series of penetrating appraisals of the settlement organisms, he penetrated deeply into the unwritten laws of the constructing settlements in Bosnia, he was making research into the public and private spheres of the town-planning structures, values and language of the symbolic therein, and the like. Briefly, hardly could we find in Yugoslavia such a brilliant culturological synthesis of a province, observed with the eyes of an architect and pondered by the scales of the space and dwelling qualities. In spite of the fact that Grabrijan appears in his book rather as a tireless scholar, an interpreter of the phenomena in the traditionally built space through numerous photographs, drawings, perspectives, explanatory sketches, he has destined his work to the creating architects. He supplies them with materials aimed at inducing them to deliberations when projecting housing constructions or dealing with the town-planning, thereby not imitating the old constructions, but to understand them and to construct new ones from their deepened knowledge. The book has not lost this value, on the contrary, it is more valuable at present; neither has it lost its value for a scholar of, and a researcher into, the popular architecture of Bosnia. These will consider this heritage with other eyes, they will adopt other methods when dealing with it. Yet Grabrijan will always remain to them an incentive from a less usual aspect, a basis that can be, it is true, critically appraised, but not neglected.

There are more than sufficient reasons arguing for the publication of this book, and even more so as it has been prepared in all seriousness and all the later additions have been eliminated. And if, however, we add thereto the anew created interest in everything peculiar, exotic, regional, local in the meaning of »postmodernism« then the book will be welcome, being, at the same time, a decent homage of the thirtieth anniversary of the author's death.

Ljubljana, November 30, 1983

Dr. Peter Krečič

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A SUMMARY OF GRABRIJAN'S PUBLISHED WORKS, IN CRONOLOGICAL ORDER

SARAJEVO I NJEGOVI TRABANTI (SARAJEVO AND ITS SATELLITES). Text by Dušan Grabrijan, sketches and projects by Juraj Neidhardt (Tehnički vjesnik, br. 7—9).

ARHITEKTURA BOSNE I PUT U SAVREMENO (ARCHITECTURE OF BOSNIA AND THE WAY MODERNITY) (DZS, Ljubljana 1957, pp. 503; Grabrijan's text up to p. 318). This is the Serbo-Croatian translation of the Slovene original the BOSNIAN ORIENTAL ARCHITECTURE IN SARAJEVO WITH SPECIAL REFERENCE TO THE CONTEMPORARY ONE. After Grabrijan's death Neidhardt added his works, dealing with other places of Bosnia and, therefore, he changed the original title of the book.

MAKEDONSKA KUĆA ILI PRELAZ STARE ORIENTALNE ARHITEKTURE U SAVREMENU EVROPSKU KUĆU /MACEDONIAN HOUSE OR A TRANSITION OF THE OLD ORIENTAL ARCHITECTURE TO THE CONTEMPORARY EUROPEAN HOUSE/ (DZS, Ljubljana 1955), simultaneous Serbo-Croatian and Macedonian translations, both from the Slovene original.

MAKEDONSKA HIŠA ALI PREHOD IZ STARE ORIENTALSKE V SODOBNO EVROPSKO HIŠO /MACEDONIAN HOUSE OR A TRANSITION FROM THE OLD ORIENTAL HOUSE TO A CONTEMPORARY EUROPEAN ONE/ (Partizanska knjiga, Ljubljana 1976). The Slovene original supplemented by the ground plans and illustrations taken from the inheritance.

KAKO JE NASTALA NAŠA SODOBNA HIŠA /THE DEVELOPMENT OF OUR CONTEMPORARY HOUSE/ (MK, Ljubljana 1959).

RAZVOJNI PUT NAŠE SAVREMENE KUĆE /THE DEVELOPMENT OF OUR CONTEMPORARY HOUSE/ (Gradevinska knjiga, Agora, Belgrade, 1973), a translation into Serbo-Croatian.

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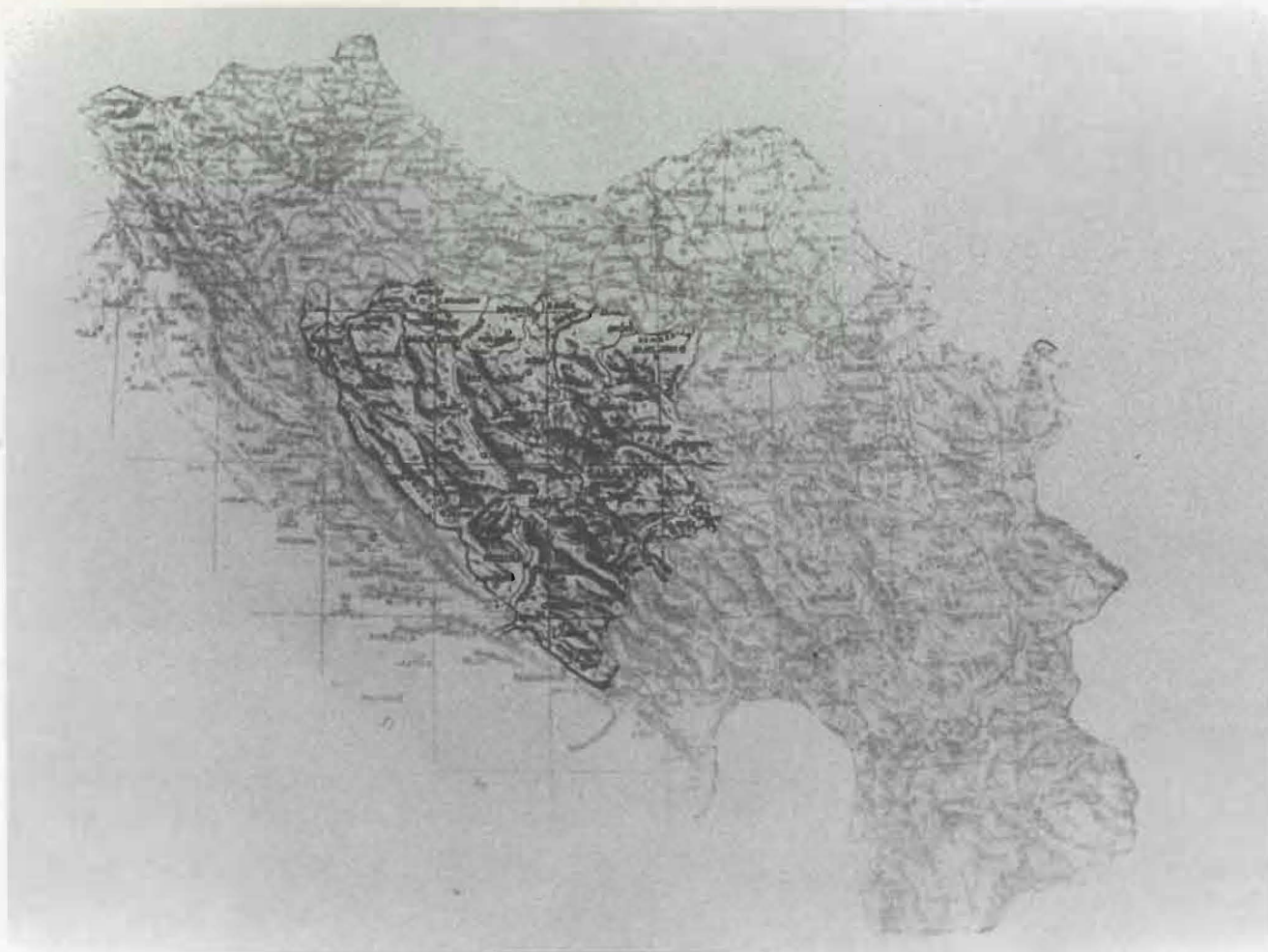
JOŽE PLEČNIK IN NJEGOVA ŠOLA /JOŽE PLEČNIK AND HIS SCHOOL/ (Obzorja, Maribor 1968).

GRABRIJAN I SARAJEVO /GRABRIJAN AND SARAJEVO/ (Muzej grada Sarajeva, Sarajevo 1970). Grabrijan's articles, from 1936 to 1941, selected and edited by Džemal Čelić.

MAKEDONSKA KUĆA ILI PREOD OD STARA ORIENTALSKO VO SOVREMENA EVROPSKA KUĆA (Mislal, Skopje 1984 — The book is printing) /MACEDONIAN HOUSE OR A TRANSITION FROM THE OLD ORIENTAL HOUSE TO A CONTEMPORARY EUROPEAN ONE/.

The Slovene original was adapted for the translation into English, as published in this book, by D. Grabrijan himself.

THE INTRODUCTION



In the heart of the SFR of Yugoslavia is situated the SR of Bosnia and Herzegovina, a country of a great and almost unknown heritage, a country with a turbulent and colorful past, with her capital, Sarajevo.

THE INTRODUCTION

This book is an attempt to draw a fairly complete picture of the various aspects of, and trends in, that oriental architecture the achievements of which we encounter in Sarajevo, the capital of Bosnia. In order to give the reader a better insight into the diverse forces, factors and circumstances which, in one way or another, for this reason or that, have contributed to the making of this architecture.

The present book contains, in addition to the introduction and the Conclusion, three parts or six chapters, namely:

A. Historical and town-planning bases contain the chapters:

- I. The Country and the People.
- II. The Town.
- III. The Charshiya (business district).
- IV. The Mahala, or Residential Area.

B. The Oriental House.

V. The core of the book is comprised in deals with the ground plans of individual and collective dwelling houses, furniture, sanitary units, and reconstructions due partly to Western European influences and partly to building methods.

C. Principles of Oriental Architecture.

VI. The book concludes with chapter Unwritten Laws, in which the principles underlying the Oriental architecture are treated.

The data were compiled from the study of architecture in Sarajevo while the conclusions have a general validity for the Oriental architecture in Yugoslavia.

The history of this country has been rather stormy. Again and again the inhabitants of this territory were forced in the past to hide from adversary forces, and take refuge in the mountains from which they stubbornly ventured into the plains and valleys as soon as the hostile forces had spent themselves.

Through the veil of ages we can glimpse the misty outlines of prehistoric lake dwellings built here and there in Bosnia, with a view to protect small scattered communities from dangerous beasts and foes. Later on we can catch glimpses of the Budmir settlement on the field of Sarajevo in which a peaceful community lived and worked.



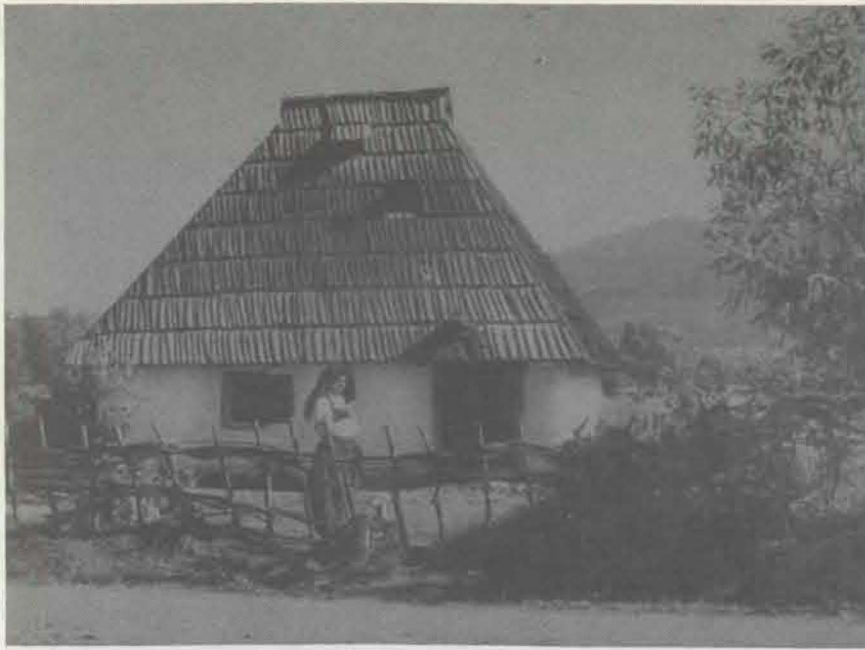
A Bosnian landscape — the Middle Bosnian Basin

As time went on the Illyrians succeeded the original inhabitants and built their strongholds which withstood many an onslaught of Celts, Gauls and Romans until they were subdued by the latter who began to build open cities in the valleys.

In the 7th century the first Slavs appear on the scene. They lived in organized communities which, however, were now annexed by the Serbians. Yet in the 17th century Bosnia attained its national and religious independence which, however, was of short duration. Driven like a wedge between the two mighty rivals the Roman and the Greek Church.

The country became a breeding place for intrigues and conspiracies which eventually led to Turkish occupation. Then part of the population withdrew to the mountainous regions. Enduring extreme hardships they settled in small, scattered villages and eventually gave shape to what is called the Dinaric house. With the simplest technical means they built a house which is considered to represent one of the finest architectural achievements.

One group of the population of Bosnia, however, embraced islamism and were, therefore, allowed to descend to the more favorably located valleys where, under the influence of Oriental ideas, they created their own architecture. The upshot of these endeavors was a harmonious town and one of the most differentiated houses in Europe.



Archaic countryside architecture

When still later the country was occupied by the Austrians who introduced a colonial system of administration and opened the gates to the advancing capitalism, an eclecticism began to show up in the architectural layout, which was foreign to, and had nothing to do with, native architecture, and which eventually led to confusion and chaos.

In our efforts to find what has survived of the once extant highly developed architecture, in looking for some remnants of tradition, we must turn to the creative achievements of the Bosnian carpenters and Dalmatian stone-cutters whose products are intrinsically different from those created by the artisans of Venice and Constantinople. The most striking features of these, one may say, masterpieces, are their simplicity and their relation to space, material, man, and nature.

Now it goes without saying that each native architecture has its beginning and end. In our case we have to do with an architecture which has as yet not come to a close and which only waits for a revival.

European architecture is looking to the Orient in the hope to get there new incentives and fresh ideas. Now we must ask ourselves the question: Why should we avail ourselves of second-hand ideas if we are at the source of original concepts. In Bosnia two trends meet and cross — the Oriental-emotional and the European-rational, which strive toward a synthesis.



Subtle town architecture

If we look back again and see all the errors of the past, we need and must endeavor to discern and salvage what has remained of the tradition. In doing so we shall encounter two kinds of architectural inheritance. One represented by works made of lasting materials which, however, serve no longer their original purpose, and which will have to be adapted to the requirements of the new community. On the other hand, we have to do with the inheritance represented by houses built of less resistant materials. Here we shall try to discover the principles on the basis of which the buildings were evolved, and we shall carry them over into contemporary architecture.

In the chapter of the Conclusion there arises the question: Why should old architectural principles be retained? Utilization of architectural inheritance is only temporary. We stand on the threshold of a new civilization. We live in a time marked by the transition of capitalism into socialism, and we find it necessary to build new things by utilizing old principles. But we are firmly convinced that the day is not far when man will demand an entirely new architecture which will be the mirror, as it were, of socialism. It is true that technology will sooner or later master the climate, as well as the continents, and architecture will have to draw upon the experiences of many peoples. The Bosnia, too, must contribute the experiences she has to the making of a new architecture.



Architecture in nature

THE COUNTRY AND THE PEOPLE



Mills on the Pliva. Kiosks — one-cell houses on piles

THE COUNTRY AND THE PEOPLE

ORIGIN OF BOSNIAN MUSSULMANS

I. If we ask a Bosnian Mussulman what nationality he is, he looks embarrassed. In the Islamic world such a question is never put, because the adherence to Islam settles everything. The first carriers of Islamism were Arabs (Semites), then the faith was adopted by Persians (Arians) and Turks (Mongols) and still later by Bosnians who are Slavs, i. e. Arians. Only Europeans judge and classify an individual by the sum total of nationality, religion and extraction. Thus all administrations which succeeded the Turkish authorities have made many blunders and caused many misunderstandings. The Austrians held that the Mussulmans of Bosnia were Turks, the former Yugoslav Government considered them to be Serbs, and the Croats claimed these Mussulmans were Croats, etc. Notwithstanding, the true state of affairs could not be abolished thereby. The article deals with their origin (according to Slojjev: The Origin of Bogomilian Faith and the Islamization of Bosnia, 1949).

II. In the 15th century the feudal lords supported the Bogomilian Church in the struggle against the central authorities. The king of Bosnia, however, endeavored to gain the favor of the Roman Church. In 1448, king Stepan Tomash, who at that time had not yet been baptised, and who still paid lip service to the Schismatic Church, pledged his word to the Holy See in Rome that he would embrace the Roman Catholic religion and do whatever the See would demand, on the condition that he got help from Rome in his struggle against the Turks. Soon afterwards the king banished the Bogomilian lords from the country; but he could not undertake effective measures against the Bogomilian peasantry. The exiled lords found refuge in Hum where Herzeg Stepan, himself an antagonist of the king and ally of the Turks and Bogomilians, received them with open arms. Here the banished Bosnian lords went over to the Orthodox Church.

The Bogomilians who remained in Bosnia, however, gradually adopted Islamism rather than Catholicism. Thus we can easily understand why already in 1435 the Turks founded Sarajevo, although at that time they did not yet definitely occupy the country. Here the native population readily accepted Islamism because the Turks made no attempt to introduce their language by force, and were much more tolerant in respect of religion than were the Roman Church and her authorities.

III. When Mohammed II definitely conquered Bosnia, he sent the native lords to Asia Minor where they were to serve him. Later reports have it that about two thirds of the Bosnian population were Turkish and of Christian origin.

In connection with the foregoing paragraph, it will be of interest to mention still another report which informs us that after the Turkish conquest of

Bosnia, the native population came to the conqueror and expressed their desire to be allowed to adopt Islamism. When the new ruler saw their good will he granted them also their request to permit the Bosnian youth to serve as janissaries in the Turkish army.

What was the reason which led the Bogomilians to adopt Islamism so promptly? Non-mussulmans who were exempted from military service in the Turkish army were heavily taxed while, on the other hand, the adherents of Islam were given ampler opportunity to make their lives worth living. Thus the Bogomilians, persecuted by the king, with no one to protect them, and imbued with feelings of contempt of, and aversion to, catholic and orthodox countrymen, began gradually to understand Islam's victorious conquests. Was Islamism not a religion they themselves aspired to? A religion that did away with statues, icons, images, relics and ceremonies; a religion that respected Christ along with the new prophet who was victorious over both the satanic Roman and the mercenary Greek Churches?

IV. Montalbano, the Italian historian, distinguished two groups of Bosnian population — the Turks and the Poturs. The latter were neither Turks nor Christians, and were despised by the true Turks.

The term Potur is composed of two words. Po means half and Tur means a Turk. A Potur was a Mussulman who still clung to the religious tradition of his ancestors.

The most complete picture of the Poturs was drawn by Ricaut, an English diplomat, who lived in Constantinople and wrote a very fine book on the history of the Turkish Empire of that time.

In the chapter on religious sects in Turkey, he discusses the so-called Codesadal sectarians whose faith was an amalgamation of Christianity and Islamism, and who read the New Testament written in a Slavonic language and the Koran in Arabic. To this religious faction then belonged the Bosnian Poturs who held that Mohammed was that holy spirit whose advent had, according to St. John's Gospel, been annunciated by Jesus Christ. They identified Mohammed with the Comforter, for they reasoned if Comforter (Greek-paraclit) is the same as Ahmed (Persian-comforter) and Ahmed again is in Arabic Mohammed then he must be the spirit they were waiting for. Reasoning along these lines the Bogomilians attempted to justify their conversion to Islamism.

This then was, according to Ricaut, the religious and ideological background against which Bosnia's conversion to Islamism took place. Ricaut saw in the Bogomilians the adherents of a religious faction who, although despised by the true Turks, were tolerated because they made good and valiant soldiers and were the outpost of the Turkish Empire on the Hungarian frontier.



A Bosnian Moslem peasant and townsman



V. After Ricaut's time reports became scarce and scanty. Because of the everlasting wars the number of the population shrank considerably. Bosnian soldiers were scattered over all battle fields. In 1651 they fought against the Poles and Cossacs in Bessarabia and Podolje, in 1683 they stood before Vienna where many were killed, they were in the battle of Zenta, and they warred against Venice. From the 10,000 Bosnians who marched against Persia only 1340 returned.

Then the Black Death scourged the country. The Mohammedans fled to towns to live among artisans and laborers, and the deserted villages were invaded by emigrants from Sanjak, Herzegovina and Montenegro. Only thus we can understand why the Moslem population which still in the 17th century formed three quarters of the Bosnian population, shrank to 40 per cent., while the Orthodox increased from 15 to 52 per cent.

VI. Some reports from the close of the last century say that there were people on the Neretva River, at Jablanica and Kruševo who still made the sign of the cross although they did not recognise the authority of the Pope and his priests. They are said to have handed down the Bogomilian tradition from father to son in the hope and belief that one day their faith would flourish again.



Peasant-women, wearing rich costumes, dancing kolo

These places were almost inaccessible for the Turkish authorities. When later some of the inhabitants were baptised or went over to Islamism their womenfolk did not hide their faces behind a veil. The girls made free love and got married only when they became pregnant. Sometimes they even drowned their offspring in the Neretva River. The authorities, however, winked at these doings.

These vestiges of the Bogomilian faith were ignored by the Moslems, as well as Christians.

For us, however, this information is of importance because it throws light upon the odd medley of nationalism and medieval mysticism which gave rise to the greatest socio-religious movement in the Balkans.



A typical cooperative tribal village with the Dinaric-type houses

ARCHAISMS

In the following chapters we shall get acquainted with the social structure buildings and settlements of the Christian population of Bosnia.

I. Social Structure

Zadruga (extended family group; cooperative)

It has been found that family cooperatives existed in Bosnia, each of which consisted of 20 to 60 members living in a common household headed by an elder who represented his community before the authorities, paid taxes, settled debts, provided for the education of children, and looked after the affairs of the cooperative in general, but who could take no decision without the consent of the members of the cooperative. Individual members might have carried out their various trades, but their earnings went to the cooperative purse.

In the mountainous regions of Bosnia there were communities which had up to 20 shepherds and several hundreds of sheep. The members of cooperatives lived by high moral standards and displayed an extraordinary sense of duty toward their community. No wonder then that their

institution survived many administrations and rulers. They could be swayed neither by Turkey nor by the Byzantine city civilization.

These cooperatives are the offspring of former tribal *bratstva* (brotherhoods) which were formed in geographically demarcated regions under the leadership of a *župan* (head of a tribal district) or *vojvoda* (duke). Originally the mayors and dukes were chosen from among the most valiant and respectable members, but later the office became hereditary.

Feudalism

When the Turks occupied the country the first traces of feudalism were already discernible in the social make-up of Bosnia. The new rulers then simply accepted the existing conditions. The peasants tilled the land in the framework of cooperatives, which, however, began to decline because many of their members left them and looked for other jobs. Taxes were still collected by the native dukes who in their turn transferred them to the authorities. As time went on the Turks began to oust the native dukes and to install their own beys. In order to appease the native lords the Turks made them agas. Thus a feudal society gradually developed which consisted of beys, agas, artisans and peasants. The latter were prevalently Christians who tilled the land belonging to beys and agas.



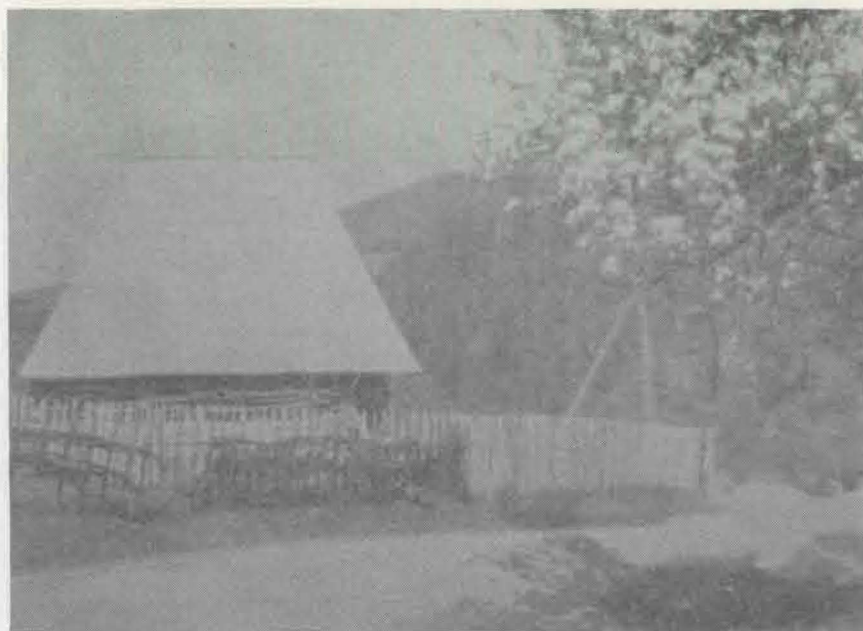
A wooden beam house on props along the Sava River

A similar relationship between the feudal lords and the peasants existed all over Europe only that in Bosnia it was much more intricate. Even today it is rather difficult to get a clear picture of the situation prevailing in those times. We, however, are interested in these conditions only so far as they have a bearing upon the development of architecture.

The Turkish law is said to have known no serfs and no statute labor. It recognized the feudal lord, dictated taxes, controlled the production, but otherwise gave the peasant his freedom and protected him, at least formally, from the self-willed feudal lord.

In reality the peasants were at the mercy of their lords who could evict their subjects whenever they chose to do so. Because of the continuous migration of the population and incessant invasions, the dwelling house could not develop.

Thus there lived those proud mountain people, persecuted by all, at the mercy of their lords, often without a shelter, degraded to the lowest level of civilization, and such was their freedom. Still, it must be admitted that here liberty was somewhat greater than elsewhere in the Balkans — the country was far from Constantinople and the Turks had higher aspirations: Europe. The ruling class remained in the valleys where they lived



Dinaric house

as officials and artisans in towns and spread Oriental civilization and culture.

II. The Dinaric House

Structure

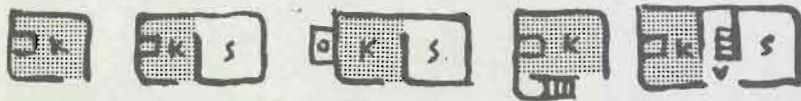
The mountainous region of Bosnia to which the Christian population withdrew, is covered with dense primeval conifer forests. There is no wonder then that this part of the country is the birthplace of what is called the Dinaric house. Built of logs, covered with a pitched shingle roof and consisting originally of a single room with a hearth in the center, it represents, in spite of the low standard and primitive technical means, a noteworthy architectural achievement.

In the lower regions where suitable straight timber was scarce, people began to build houses of wooden frames filled in with wickerwork or sheathed and plastered.

Here and there two-storied houses were built in which both techniques can be seen. The first floor is made of logs, the second floor of a framework and sheathing.



k kitchen
s room
h anteroom
H basement room
v entrance



Development of the Dinaric house:

GROUND PLANS OF ONE-, TWO-, AND THREE-ROOM HOUSES

Ground Plan

Originally the house had only one room with a hearth in the middle and an opening into the garret through which smoke escaped. Because of the agitated conditions prevailing at that time it took a considerable interval before this house could be developed. Later a partition wall was set up which divided the house into two rooms of the same size. The hearth was moved to the wall. One room, the odaja (odaya) was reserved for the head of the family, while the remaining one, the kuća (koocha), was used by the other members of the family.

Still later the odaja was again divided into two rooms.

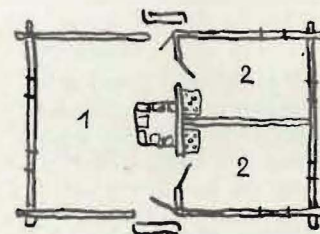
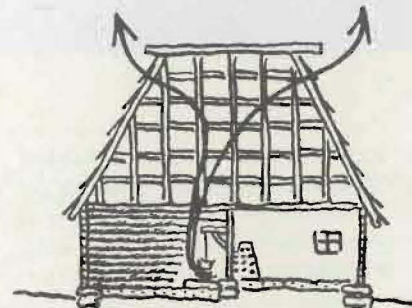
Farm buildings as stables, storage rooms, corn sheds and barns were erected around the house without any definite plan.

On slopes the koocha na magazi was built. The first floor consisting of a stable and a storage room was accessible from one side, the rooms on the second floor from the other side of the house.

Then there is the chardakliya a house with the second floor jutting out over the first floor. These structures, found in northwestern Bosnia, were evolved very likely under the influence of oriental concepts.



Courtyard of a Dinaric house, with an archaic wagon



The ground plan and longitudinal and cross section of a Dinaric house — smoke-house



Čardaklija — house with the second floor jutting out over the stable or cellar

Furniture

There is almost no furniture in the room. A heap of straw in one corner of the room is for the old people while the younger members of the family reclined on the naked floor around the hearth. A kind of bed appears much later when a stove was set up in the room. It was a very primitive affair: two racks similar to sawbucks on which boards were laid.

There were no wardrobes or cupboards except a pantry in the wall, called kiler (killer). Two poles below the ceiling served as clothes hangers. The more valuable attire and fabrics were kept in large chests, trinkets and such like in small boxes called chekmedja.

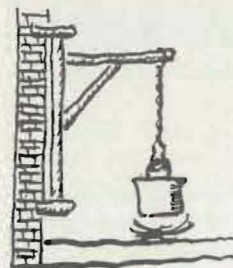
A table in our sense was not known. At meals a round board was laid on the floor. This was the so-called sinija (seeniya) which, when not used, hung either in the doorway or in the kitchen against the wall. In addition there were two or three low three-legged stools for guests. The hosts themselves squatted on the floor.

In the koocha were a container for flour, called hambar, a kneading trough called nachva, and one or two shelves called raf.

The kettle, frying pan and bowl were made of copper, the other kitchen utensils of wood or clay. There were but few forks and knives in the



Interior of an open hearth room in a Dinaric house



hearth with a kettle



tripod



sadžak — metal tripod



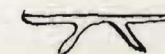
tava — pan



načva — woden kneading trough
three-legged stool



spindle
stand



sinija — low round table spindle stand

Furniture of a Dinaric house



An old Bosnian mill

house. Soup and broth were eaten with spoons, everything else with fingers.

The Cooperative House

The Dinaric house developed simultaneously with the growth of cooperatives. So it happened that sometimes up to 70 members of one family shared the same house. Thus only the older people could sleep in the house while the youth withdrew to the hay-lofts.

In eastern Bosnia and Krajina (Krayena) where the peasantry was much better off than elsewhere, the so-called zgrada began to develop. These were auxiliary dwelling houses set up near the main house. The main house had two rooms, one for the head of the family and one for all other members. There were 1 to 5 auxiliary houses for newly married couples and single girls. The zgrada had only one room, and was odaya and store-room all in one. Its development, however, was different from that of the odaya. The zgrada developed because of an agglomeration of buildings while the odaya was the result of the division of space. The zgradas were laid out either in a straight line or in a crescent around the koocha. The dwelling houses are fenced off, in front is a yard, and opposite are barns, sheds and other farm buildings.



The cooperative house with a common kitchen and the auxiliary houses of the family members



A shepherd



Cooperative houses on piles along the Sabva River in the Donja dolina

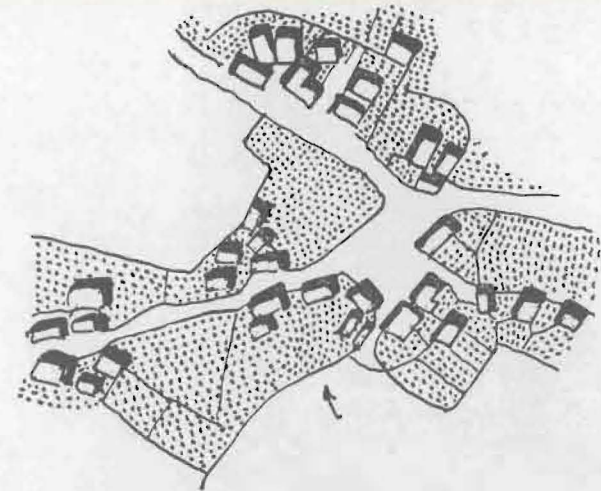
In the mountainous regions the houses were built on a more or less level ground so that a garden and yard could be laid out around the house. In the background are the *gay* and the *zabran*, in front orchards and fields. All is enclosed with a fence.

III. The Settlement

Several cooperatives together form a settlement. The relationship between the cooperatives was regulated by compacts and agreements.

As time went on adjacent settlements agglomerated into villages. The forests and pastures belonging to a village were common property. Such villages extended sometimes several miles across the country.

There were two factors instrumental to the development of these villages. The rapid growth of the number of members in cooperatives led to the erection of buildings between the existing ones. Yet the new houses were located in such a manner that the village retained its original pattern of a dispersed settlement. If, however, a member left the community and settled somewhere in the neighborhood then his house became a nucleus around which a new village was laid out.



The growth of a Dinaric village

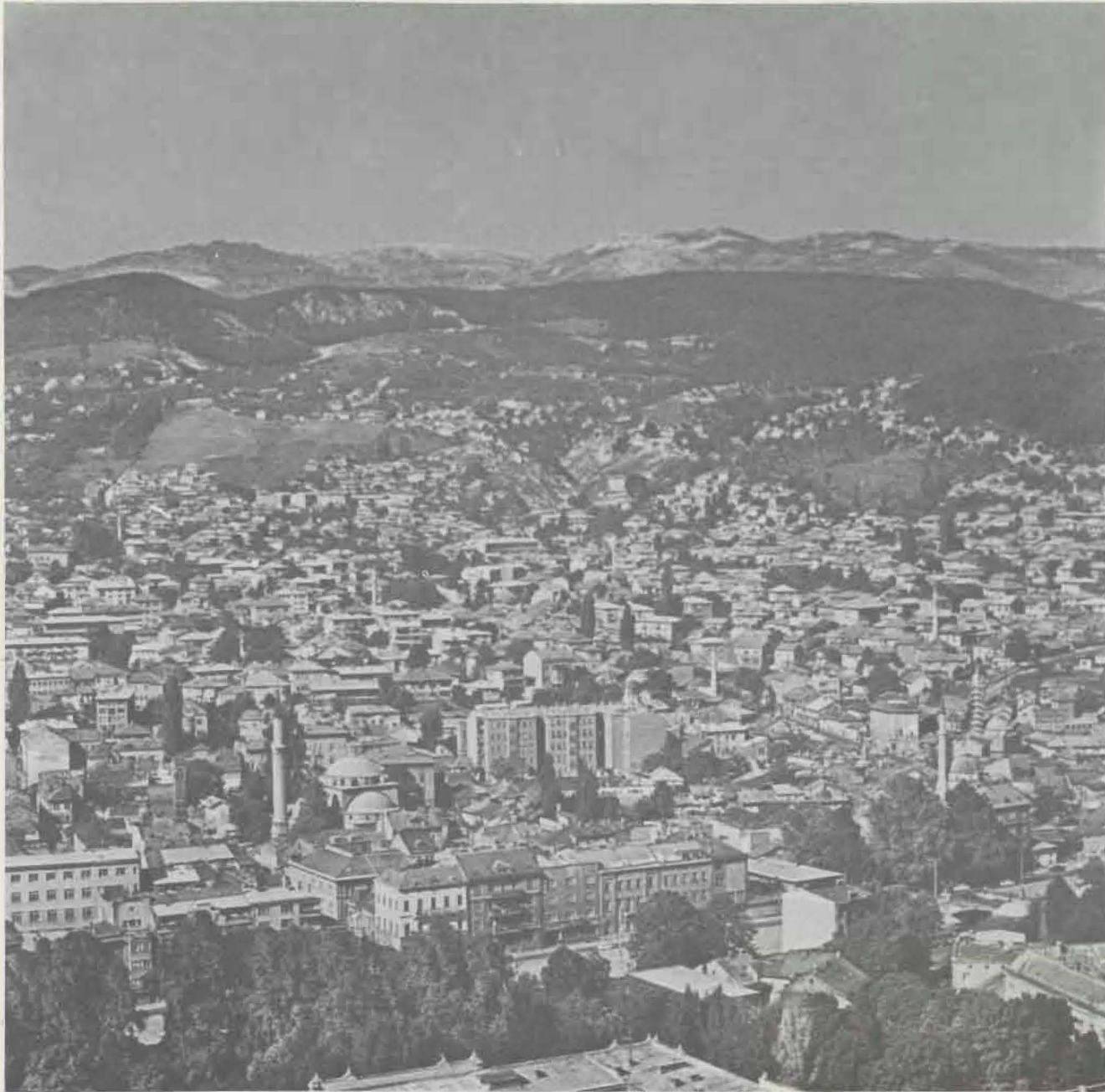
Basically different was the division of cooperatives in the Karst valleys of Herzegovina where the fields were at some distance from the settlements. Here houses were built close by those already standing, with the result that the villages became more and more congested. These villages seem to have developed under the influence of Mediterranean architectural concepts. When once the fields could no longer support the ever growing community, the supernumerary members of the community emigrated and gradually laid out new villages.

Although the development of somewhat larger settlements than the village, is also interesting, we shall not discuss it here in detail. It must be only pointed out that market towns did develop. Since the beys made no efforts to organize trading posts on their farms, the rural population had to purchase the required goods in market towns the backbone of which were artisans who later became merchants.



Vranduk, a settlement of the Dinaric houses from the 14th century

THE TOWN



A panoramic view of Sarajevo



The old Sarajevo — a harmonic town

THE TOWN

Under the influence of traditional concepts, the Orient, and the political, economic and cultural trends the town of Sarajevo gradually began to take shape in the valley of the Milyatska River.

The builders of the town were, no doubt, led by the desire to obey the unwritten architectural laws of Bosnia: The road is the spine of the town and the valley its shape, the Charshiya (business center) its heart, the vegetation its lungs, and the river its soul.

The Charshiya was laid out in the valley and shows a rather regular pattern. It is spangled with architectural masterpieces: mosques (prayer houses), hans (hotels), hammams (baths), bezistans (covered markets) and other magnificent buildings.

On the slopes of the valley the Mahala (residential area) was built. Here the builders had followed a more irregular pattern. Meandering streets leading to the Charshiya give this part of the town a lively, picturesque, oriental physiognomy.

As time went on, however, the unwritten laws began to fade and were eventually superseded by new, this time, written laws. The apartment

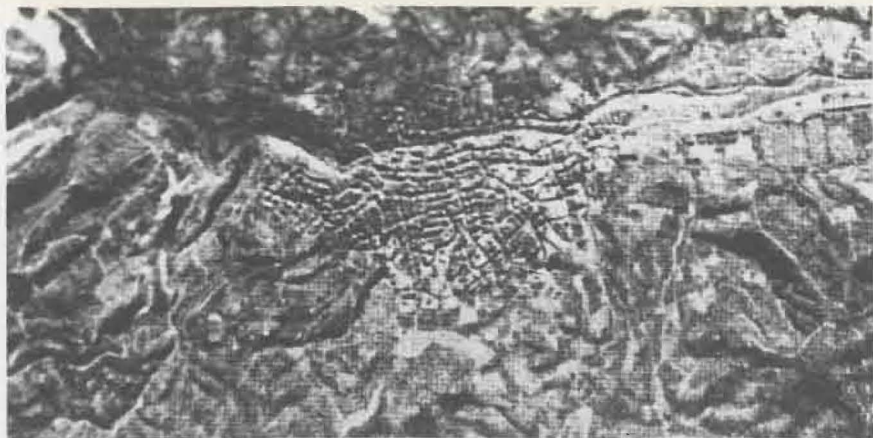
house superseded the one family house and vested interests were more important than the wonderful view from the Mahala. The gardens withered in the clutch of realtors, the sun hid behind clouds of dust and smoke, and the landscape became sad and dreary. In the wake of social incongruity came architectural incongruity. The lofty concepts of the country were exchanged for foreign misconceptions.

Thus it will be necessary for the architect of tomorrow to set right the wrongs done to, and rectify the errors committed in, the architectural development of Sarajevo. Furthermore, the architectural inheritance will have to be put in harmony with the requirements and trends of the present.

THE DEVELOPMENT OF FEUDAL SARAJEVO

Sarajevo originated in the times of Turkish invasions and the occupation of Bosnia. It developed from the small settlement Vrhbosna which the Turks occupied during the civil war in 1416, lost and regained in 1453. They fortified the settlement and made it a base from which they raided the territory of the Bosnian king.

The advantage of Sarajevo over other localities of Bosnia lies in its favorable position near the source of the Bosna River, at the foot of Trebevitch, and at the center of the Bosnian road system.



The situation of Sarajevo among the mountains

the street is the backbone
the basin is the space
the Charshiya is the heart
the green mantle is the lungs
the water is the soul of the town



A view of Sarajevo from the Bijela Tabija Fort

Around the crossroads of Sarajevo developed the old Charshiya, the central area of the town. A record dating from the year 1462, states that the locality between the present Kolobara and Bendbasha was called Brodets (small ferry). This would indicate that a ferry linked the two sections of the road leading from Shirokats to Shirokacha. The Turks soon substituted a bridge for the ferry and began to build stores and hans along the old road.

The same record has it that there was yet another road, the Bioski put, which led into the highroad Sarajevo—Srebrenica. It has been inferred from the record that this road, too, led into the Charshiya. This then was the crossroads at which old Sarajevo that is to say the Charshiya, was laid out. The Constantinople Highroad which ran over Alifakovats toward Kozya Chupriya must also have begun somewhere in the Charshiya.

First Building Period

In the beginning the Turkish commanders lived very likely in the fort itself. Later, however, Isa Bey transferred his residence to Sarajevo where he built his palace on the left bank of the Milyatska River. Since, originally, the Bey's residential palace stood solitary amid the surrounding fields, it was called Saraj-ova-si i. e. the palace in the field.



The Bijela Tabija Fort dominates over Sarajevo

Because each newly appointed ruler considered it his duty to erect a new mosque, or another public building, the town spread at a stupendous rate.

Thus Mehemet Bey Minetovitch, the successor of Isa Bey, built his mosque west of Isa Bey's house of prayer in Stara Varosh, the old Mahala of Catholic merchants.

Mehemet Bey's successor, Aias Bey, erected a mosque in the quondam sword-makers' mahala, and public steam bath behind the clock tower.

Yahya Pasha who followed Aias Bey, built one near the charshiya on the slope of Churchitsa Briyeg, and his successor Yakub Pasha another one east of the former and outside the Charshiya.

Skender Pasha, the successor of Yakub Pasha, erected a tekia (dervish monastery) in a secluded site on the left bank of the Milyatska River, a caravansary on the right bank, and several stores and mills farther down-river from which the Charshiya na Hisetih later developed.

Firus Bey who came after Skender Pasha, erected a religious high school building on the slope of Pirusha.



The Shehid tombs in Alifakovac

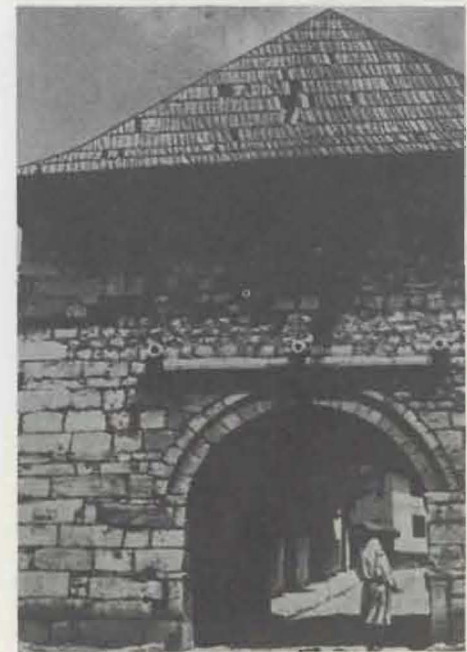
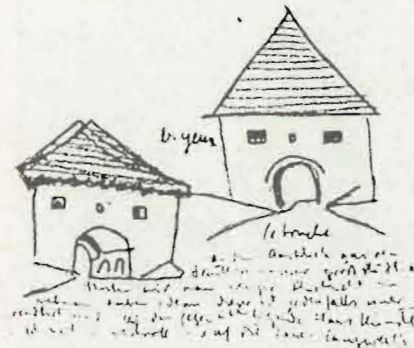
Isa Bey's son Mehemet Bey built his prayer house in Bistrik where Bali Bey later also erected a mosque.

The example of these rulers was followed by lesser dignitaries: cadis, sheiks, priests, merchants, and artisans who also raised many a prayer house in Nadkovachi, on Churchitsa Briyeg and farther west on the southern and northern slopes above the Milyatska River.

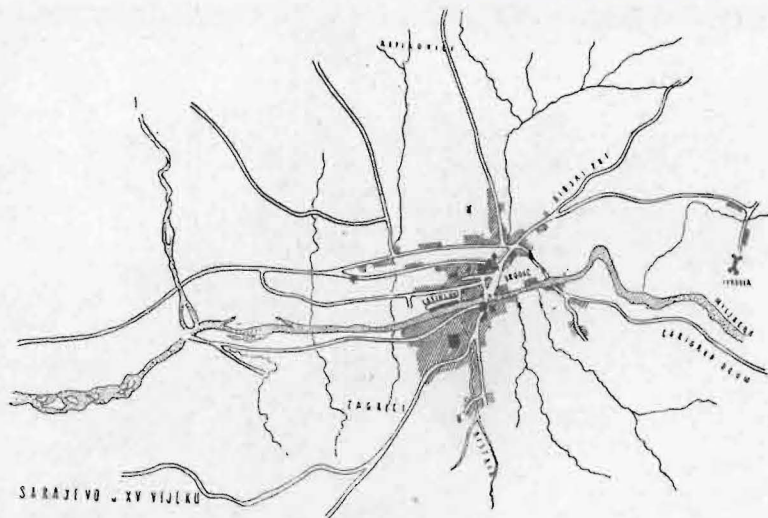
As we have seen in the foregoing paragraphs, the town developed from its center towards the outskirts and along the main roads.

In those times Sarajevo could boast of a multitude of private houses, 16 mosques, 2 night-quarters for poor travelers, 2 soup kitchens, 3 tekias, 1 high school, several elementary schools, 4 baths, 2 large hans and a fine Charshiya. And this building development was replaced, in the year 1521, by another, even richer and more splendid one.

Town Gate in Ploča (entrance gate)



Town Gate in Sirokača



The development of Sarajevo in the 15th and 16th centuries

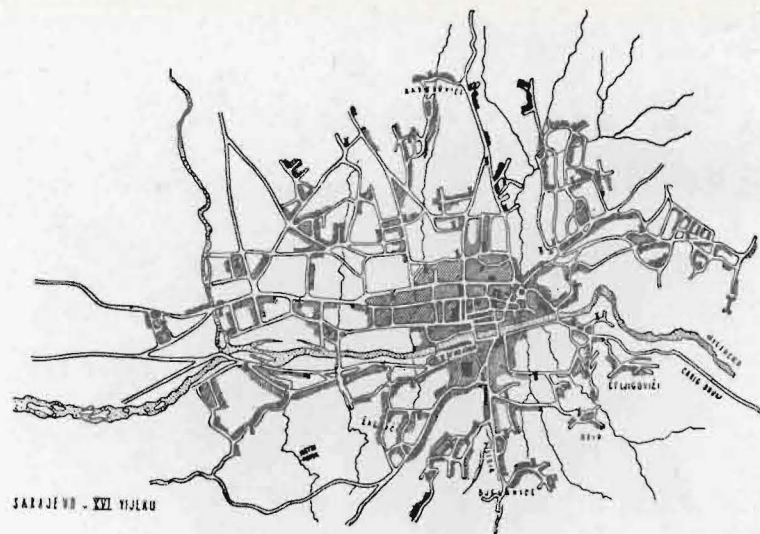
Second Building Period

In the year 1521 Gazi Husrev Bey was appointed to the office of Sandjak Bey. He ruled the country with short breaks till the year 1541. He seems to have been a member of the native nobility. His father Ferhat Bey adopted the Islamic faith and married Sultaness Selchuka, the daughter of Sultan Bayazid II.

Husrev Bey's term marks the beginning of the golden age of the architecture of old Sarajevo. First of all he promoted the development of the Charshiya where he built a group of various religious buildings and the so-called Bey's mosque: 2 turbehs (burial chambers), a medresa (religious high school), hanikah (monastery), mekteb (elementary school), imaret (kitchen for the poor), and musafir hana (free night quarters for poor travellers) further a huge bezistan (covered market place), a caravansary called Tashlihan, 60 stores in the Charshiya, and several baths.

Husrev Bey's example was followed by other well-to-do people, so that soon a lively architectural activity set in. Mosque after mosque was built high up in Zagrichi and on the sloped of Alifakovats.

The population streaming at that time from the rural areas to the town, settled first in the neighboring villages which belonged to the nearby Mahalas (neighborhood units) of the town. But as soon as a mosque was built in a village it became a new Mahala. The names of these Mahalas show that they evolved from villages.



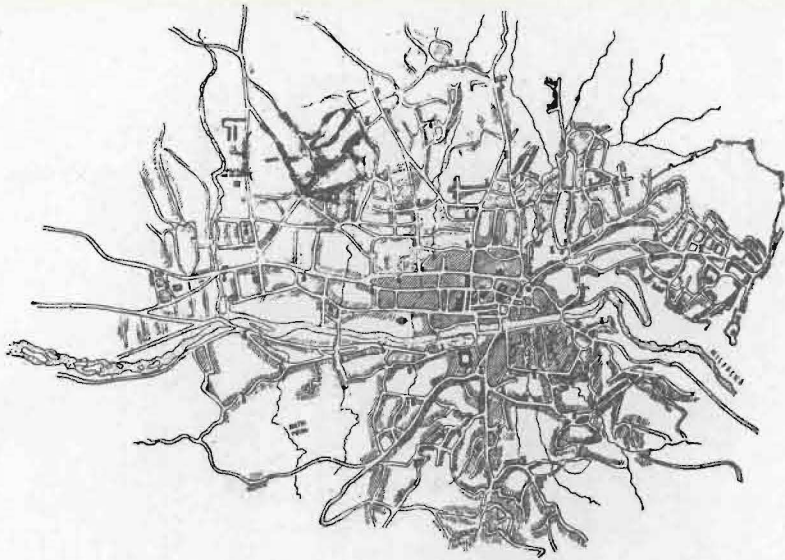
In this manner then did Sarajevo, a kasaba (borough) when Husrev Bey came to Bosnia, grow and expand until it became a town at the death of its great promoter.

Third Building Period

This last period of architectural activity begins with the death of Husrev Bey in 1541 and comes to a close in the 16th century.

The Charshiya had in the main been completed already before that time. At the road leading from Shirokats to Shirokacha a covered market place was laid out by Rustem Pasha. Behind the Tashlihan, a han built of stone, Ferhat Bey erected a mosque which became the center of the Ferhadia mahala. Ali Pasha built a mosque on the left bank of the Koshevo Brook, which seems to have been very near built up at that time.

Toward the close of the 16th century Sarajevo had about 50,000 inhabitants, 100 mosques, 2 churches, 1 synagogue, several tekias, imarets, musfirhans (night quarters for travelers), 3 medressas (high schools), 6 hammams (public baths), 3 bezistans (covered market places), several dairas (storehouses), numerous hans (hotels), about 100 shops, and 10,000 dwelling houses amid gardens on the slopes extending on either bank of the Milyatska River across which led 4 wooden and 4 stone



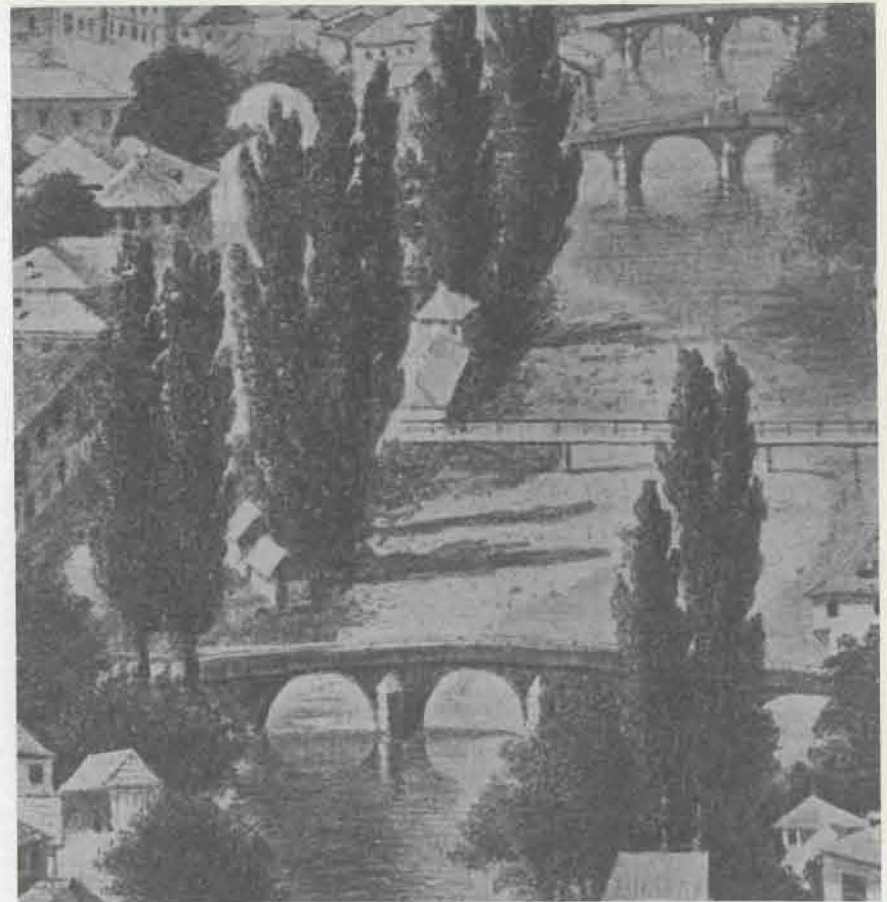
bridges. The town water supply was from the numerous near and far sources.

When in the second half of the 16th century Sarajevo ceased to be the capital of Bosnia, it expanded no farther. Yet the town remained, in spite of all vicissitudes, the most progressive town in Bosnia, a fact which was due chiefly to its favorable location.

HUSREV BEY'S DEATH

There exists no trustworthy report on the death of this great promoter of architectural activities in the 16th century Sarajevo. Yet the circumstances of his death can be gleaned from an old popular song which, rendered in prose, reads:

Two Constantinople rifles were fired to kill Sarajevo's Husrev Bey who dying complained: »What sins have I committed that foes have slandered me before the Sultan, my master? Did I not build a medressa and 7 imarets (soup kitchens for beggars, travellers, and students of divinity), the clock tower and a mosque near by, a tashlihan and a bezistan? I built three bridges across the Milyatska and made Sarajevo a city. Yet my foe hates and despises me. The rustle in the trees on the mountain and the bubble of brooks will sooner die than — mark my words! — will the foe be driven from the earth.«

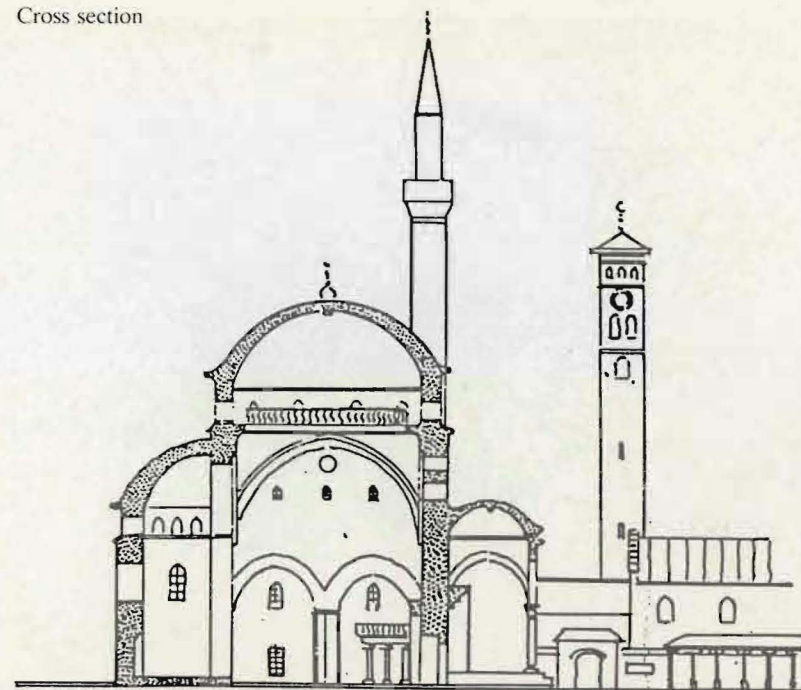
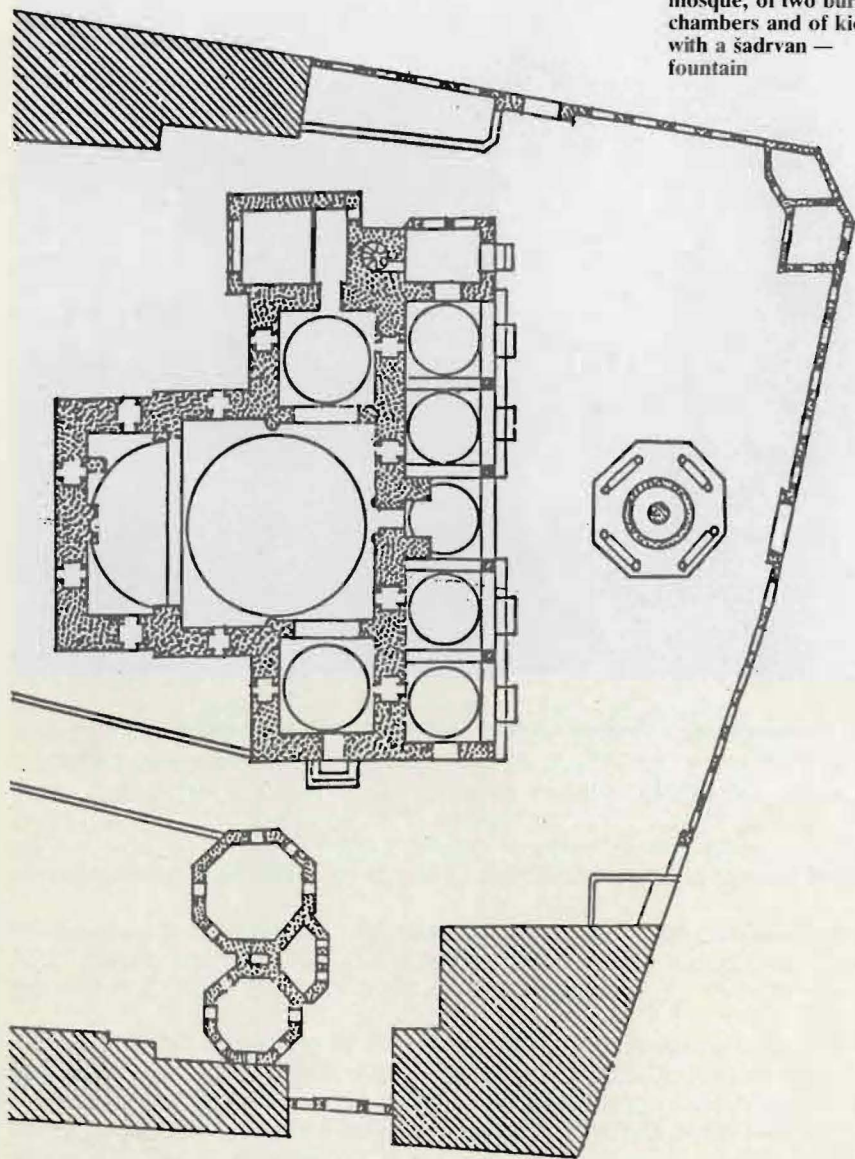


The Miljacka River — Sarajevo, a town of bridges and poplars (the 16th century)

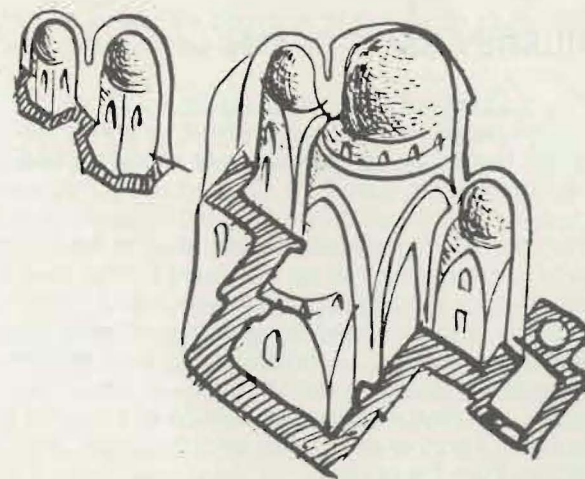
The Gazi Husrev Bey's Mosque in the Charshiya is the biggest mosque in Sarajevo
(dating from the 16th century)

Cross section

The ground plan of the
mosque, of two burial
chambers and of kiosk
with a şadrvan —
fountain



Axonometry





Gazi Husrev Bey's Mosque Structure



Gazi Husrev Bey's Mosque with the courtyard fountain

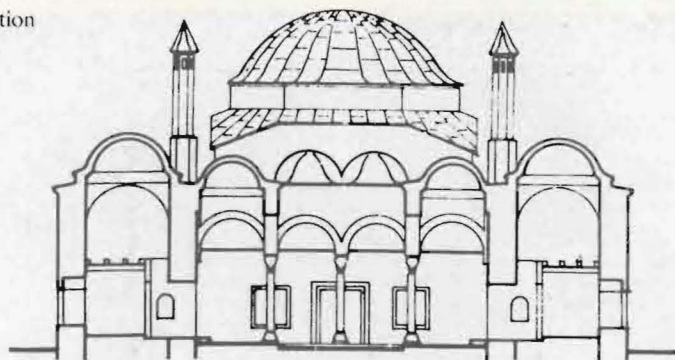


Gazi Husrev Bey's and Murat Bey's mausoleums

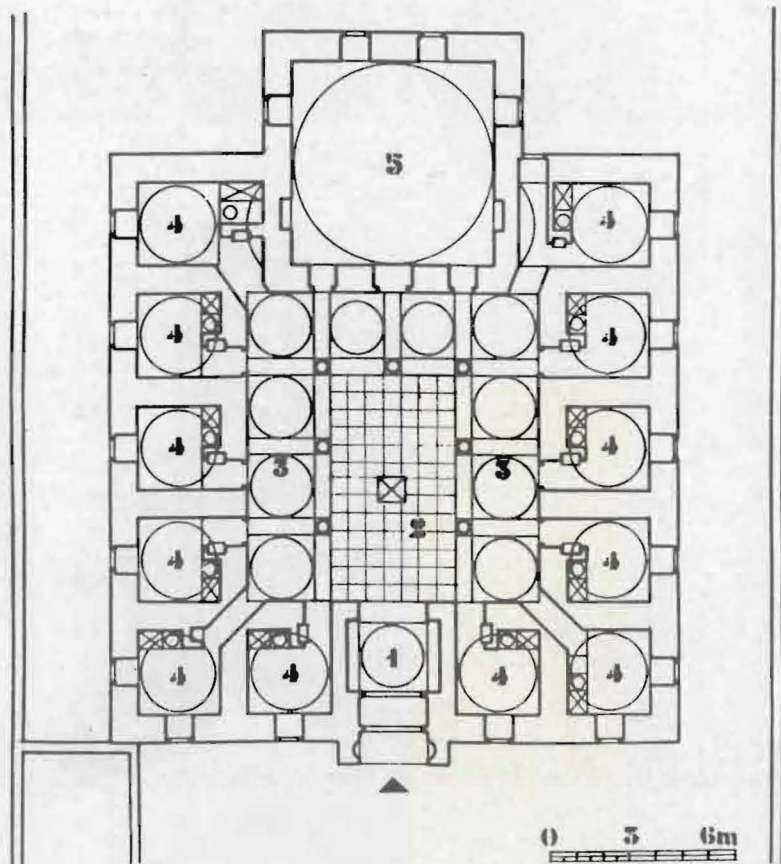


A view of the Kuršumlija Medresse chimneys and domes, of the Husrev Bey's Mosque and of the Sahat kula — Clock Tower

Cross section

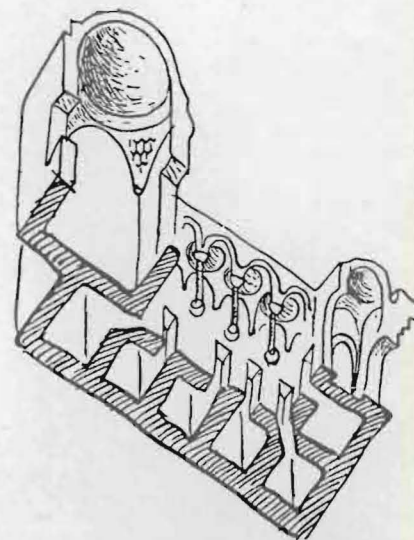


Ground plan



The Kuršumlja Medrese (a Moslem divinity school)

Axonometry



- 1 entrance
- 2 atrium with fountain
- 3 trem — porch
- 4 rooms
- 5 lecture hall



The Kuršumlja Medrese Atrium

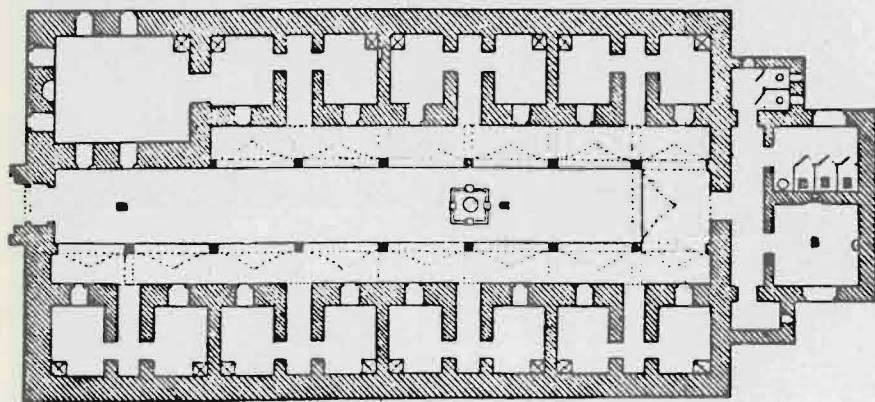


Porch, Husrev Bey's monastery

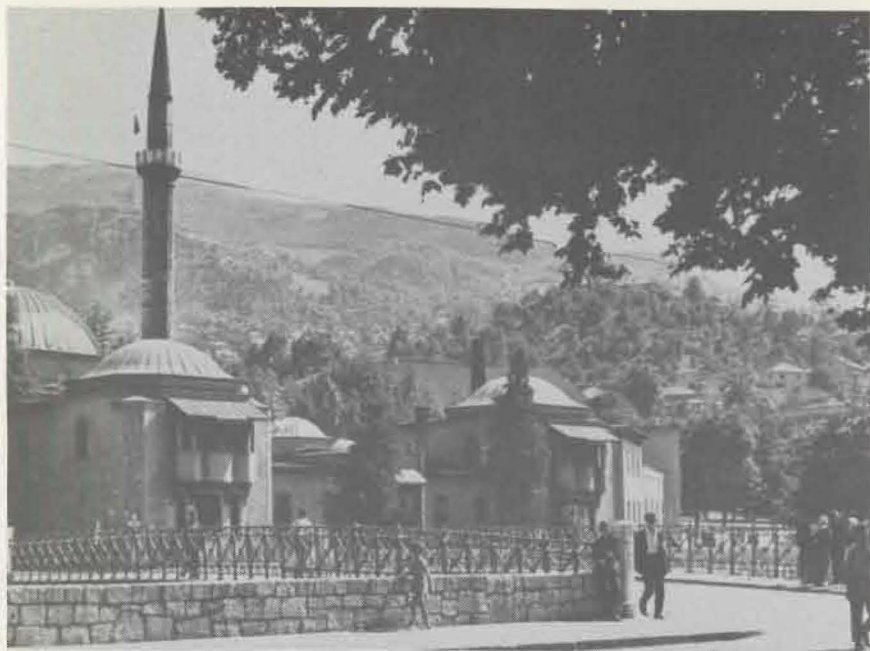


A view from a minaret of the Kuršumlja Medresse and of the Hanikah (ruins)

Hanikah monastery, ground plan



Sahat kula — clock Tower — the highest structure in the Charshiya



Tsar's Mosque on the road toward Trebević (restored)

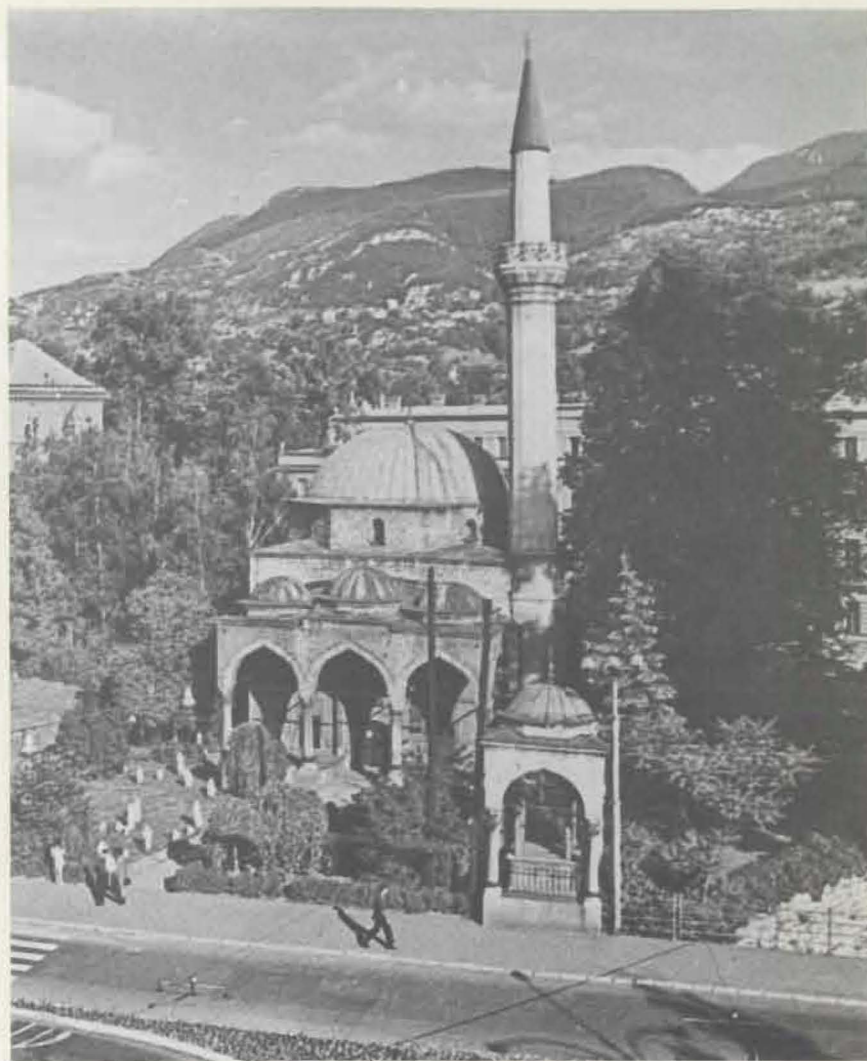
SARAJEVO IN THE 17th CENTURY

(From an account by Euliya Chelebiya)

The following is a description of Sarajevo quoted freely from a book of travels written by the Turkish traveler Euliya Chelebiya who in the 17th century twice visited the town.

Sarajevo was, the Turkish traveler says, built by king Dobrovitch who set up a dozen cabins in the wilderness, and built on an adjacent slope a fort in which he garrisoned 300 soldiers. The climatic conditions of the surrounding country having been found favorable, the settlement soon began to grow and develop.

Later the settlement was occupied by Ahmed Pasha, the ruler of Herzegovina, who built within the walls of the fortress a mosque, houses for the imam, the muezzin and the bugler, a granary, and barracks. The fortress stands on a steep cliff commanding the Milyatska River. Toward Mokro and Mlini, however, it is not so well protected, especially because the walls are beginning to crumble.



Ali Pasha's Mosque

In the valley Ahmed Pasha built his palace called Saray. Thus the town was originally called Bosna-Saray after this palace and the near by source of the Bosna River.

It is delightful to contemplate this town laid out amid rolling hills topped with forts, spreading on either bank of the Milyatska River, and studded with fine one-or two-storied houses lying in the midst of gardens, vineyards and brooks.

The town has about 104 Mahalas, ten of which are inhabited by Serbs and two by Jews. There is no Catholic Mahala because Catholics come to the town only for short stays.

Sarajevo boasts many fine palaces and about 17000 well built two-storied houses.

There are 23 luxuriously appointed hans among which Hadji Beshir Han and Hadji Tartar han are most renowned.

Bachelors find shelter in 8 blockes reserved especially for them. Furthermore there are 7 imarets, soup kitchens for beggars, travelers, and students of divinity.

The town has 170 mosques, the most famous of which are: Ferhat bey's mosque downtown. Ali Pasha's in the suburbs, Tsar's mosque on the road toward Trebevitch, Husrev Bey's in the Charshiya near the clock tower and near it Husrev Bey's grave in the turbeh, and besides it another smaller turbeh with his duke, Murat Bey's grave. In addition there are 100 mosques in which no prayer meetings are held on Fridays.

Sarajevo has a great many high schools, the most beautiful of which is that built by Husrev Bey. There are 180 elementary schools and eight schools in which hafizes teach the Koran.

The most exquisite among the 47 dervish tekias is that erected by Mevli. It has a vast hall for religious ceremonies, numerous corridors, about 80 bedrooms, a loggia, a dormitory for poor travelers, and a roomy kitchen.

The catholic and orthodox churches are, it is true, small, but they are well kept. There is also one Jewish synagogue.

The Charshiya or business center is spacious and laid out in a regular pattern similar to the Charshiyas in Brusa or Halep. The roofs of the houses are made of wood. There are over 1080 shops. Artisans engaged in the same line of handiwork have a Charshiya of their own. There is also a fine market place covered with a dome where goods brought hither from India, Arabia, Persia, Poland, Czechoslovakia, Venice, or Dubrovnik, can be purchased. Pack animals are the sole means of transportation, because the ports of Zadar, Shibenik and Split are so near that it takes only two or three days to make the trip.

There are 5 hammams and about 670 private bathrooms. Water is obtained from 110 wells and numerous springs. In the court of each mosque is a fountain. The town is said to have 1060 springs and 700 wells.

The Milyatska River flows on its way from the Mokranya Mountains right through Sarajevo and debouches into the Bosna River which is an hour's walk from the town. The finest of the five bridges leading across the river, is the so-called Tsareva Chupriya (Tsar's Bridge).



Čerkrekči Muslihundin's Mosque in the Charshiya (the 16th century)



Sebilj (structure with water taps), Mehmed Pasha Kukavica's in the Charshiya

In the town there are 176 mills which can handle enormous amounts of grain per hour because the current of the river is exceedingly swift.

The vicinity of the town is spangled with 2600 paradisiacal gardens laid out amid brooks, fountains, kiosks and vineyards.

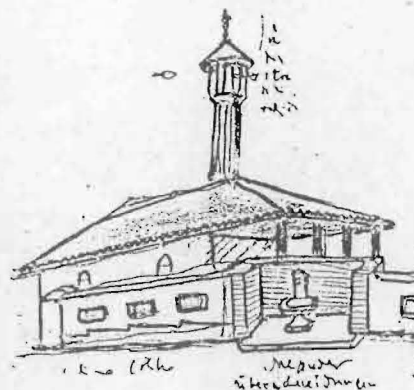
Townspeople like to enjoy their leisure at the source of the Bosna River where angling is excellent. They live in tents or cabins, and enjoy the magnificent scenery.

The air and water being first class, there is no wonder that the people are healthy, vigorous, and long-lived. All over the town one meets robust graybeards and swarms of ruddy children who are a delight of the eyes.

The people are friendly and honest. When the muezzin calls the people to prayer, the shops are left open, but nothing, of course, is ever missing upon the return of the proprietors.

The inhabitants of the town are mainly soldiers, artisans, merchants or officers in the service of agas for whom they collect taxes from the tax payers.

Česma — fountain beside a mosque



Fountain in front of Ali Pasha's Mosque



The Bosnians are valiant and trustworthy soldiers who by day and by night guard Bosnia, Herzegovina, Budim, Egra, Kanija, and 760 towns from the lurking enemy.

There are many towns and cities in the Turkish Empire the names of which contain the word Saraj. There is Ak-saray in Anatolia, Tabe-saray between Persia, Kurdistan and Tagistan, then there is Sabri-saray on the shores of the Black Sea in Moldavia, Vize-saray in Rumelia, and many others. Yet the most beautiful of them all is Bosna-saray, the town that lies like a gem upon a velvet cushion made of gardens, forests, vineyards and bubbling waters.



Streets and buildings of Sarajevo in the year 1882

THE CHARSHIYA



The Trgovke — shopping centers, stores beside store (artisans' workshops and stores all in one)

THE CHARSHIYA

We have already seen that in the town of Sarajevo the residential area (Mahala) was strictly separated from the business area (Charshiya). Faithful to the concepts handed down from generation to generation, the artisans and merchants of Sarajevo laid out and expanded the Charshiya, the Oriental bazaar, located in the heart of the town on the banks of the Milyatska River. They grouped their shops around mosques, hammams, market places, and hans. Each trade had its own district. Thus there were the Ashchiluk or boardinghouse district, the Abadjiluk or clothiers' district, the district of Bazardiani or merchants who sold imported goods, the Churchiluk or furriers' district, and the districts of pastry cooks, silkmerchants; blacksmiths, butchers, goldsmiths, coppersmiths, bookbinders, skinners, saddlers, and many other artisans and merchants. The districts were laid out in harmonious patterns forming a mosaic-like whole. The small low shops were arrayed along narrow streets so that this part of the town looked like a honeycomb.

These stores were called duchans and served as workshops and store-rooms all in one. They were so small that the artisans squatting on the floor did not need to get up when they wanted to get hold of the articles lined up on the shelves at the walls.

Thus the prospective customers strolling along the narrow streets, had to take only a step or two towards a shop and they were directly before a multitude of articles which were a delight of the eyes and which were bought, not because they were needed, but because they had an irresistible charm.

Enchanting like the graceful articles made by the artisans is also the architectural layout of the Charshiya in which the principles of the unwritten architectural laws were followed to every extreme consequence. Thus we can see how the buildings rise pyramidally from the little shops to hotels and covered market places and further to the leaden domes of baths, mausoleums, high schools and mosques, and still higher to the tops of cylindrical and conic minarets.

Behind the lattice-windows in the walls around the mosques, in the atriums and mausoleums, are open, semienclosed or closed spaces where tombstones brood amid green lawns, fountains play, and old trees raise their verdant crowns over paved courts. The whole conveyed the impression of a gorgeous multicolored oriental rug across which flowed the puissant Milyatska River and the gentle Moshchanitsa Creek, walked gaily attired citizens and peasants, plodded caravans of heavily laden pack animals, while the air reverberated with noise, yells, the call of muezzins, the bubbling of water, the clatter of hoofs, the clangor of tools, and the throb of the town's big heart.



Poplar, stressing the mosque's dome and minaret



Ground plan of the Charshiya at the end of the 19th century



Quilt maker



Coppersmiths

THE RISE AND DECLINE OF THE CHARSHIYA

When in 1435 the Turks definitely occupied Vrhbosna they built on the left bank of the Milyatska River the Governor's Palace (Saraj) which represented the symbol of their political power, then they erected the Tsar's Mosque as the ideological symbol of their growing power, and still later they began to lay out the residential area, the Mahala.

As time went on a han, a bezistan and a hammam were constructed on the right bank of the Milyatska River, around which the business area (Charshiya) soon began to mushroom — the Abadjiluk of clothiers, the Sarachiluk of saddlers; the Bazardjaniluk of merchants and many others. This was the nucleus around which the first Charshiya developed.

The originally residential areas around the mosques gradually became Charshiyas. Near Mehmet Bey's Mimetović mosque were the business districts of tailors, barbers, skimmers and Berbers. Around the mosque built by Aias Pasha spread the business zone of sword-makers; around Firuz Bey's bathhouse the druggists, pastry cooks, butchers and skimmers established themselves. North of Chekrekchin's mosque the blacksmiths settled and east of Krachula Street upholsterers and makers of wooden saddles located themselves.

When in 1526 Husrev Bey was appointed to the office of Bosnia's Sanjak Pasha, the business districts of shoemakers, bookbinders, and goldsmiths developed in the neighborhood of his mosque. During his rule also coppersmiths, locksmiths and painters began to set up their workshops around Bashcharshiyska Mosque.

Rusten Pasha laid out the third and last covered market place called Brusabezistan because goods imported from Brusa were sold there.

We can see that in the 15th century only such trades were carried out in the Charshiya that had to do, in one way or another, with warfare. These artisans, however, were not organized in guilds.

In the 16th century when the guilds began to develop still other artisans settled in the Charshiya. The guilds did not only protect the interests of their members, but they also controlled the quality of products.

When in the 17th century money was introduced as a medium of exchange some more trades were developed with a view to satisfy the growing demands of the feudal lords.



Dry goods store

The structure of the Charshiya remained unaltered until the 19th century when, because of the growing industrialization, some trades began to decline and new, hitherto unknown, began to develop.

Simultaneously with the development of various handicrafts, commercial activities began to increase because the town of Sarajevo was favorably located on the route Constantinople—Dubrovnik—Venice.

At first the foreign merchants concentrated their activities to the area around hans and the bezistan. The merchants who came from Dubrovnik soon built their own business district called Latinluk or Frenk Mahala. In the 16th century two more covered market places became centres of business activities.

As time went on the demands of feudal lords kept steadily growing. The result was a brisk exchange of commodities with Venice through Split and Dubrovnik. Agricultural products, honey, wax, wool and cattle were bartered for linen, rice, paper, and silk.

In the 17th and 18th centuries, however, when money was introduced as a medium of exchange, the native artisans themselves began to export such commodities as textiles, ornaments and vessels of beaten gold, and copper kettles. On the other hand, import trade commenced to flourish.

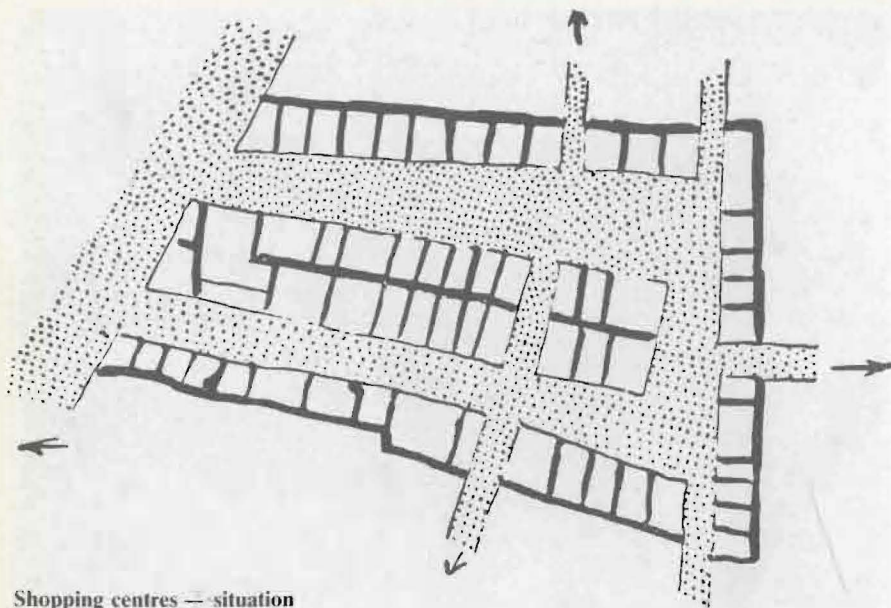


Store beside store

The furriers and tailors who owned somewhat larger workshops, ordered large quantities of goods such as furs, silk, brocade and fancy goods and sold them again on the local market. Thus these artisans became merchants.

It is of interest to note that Sarajevo was especially prosperous after the French Revolution when, because of the English blockade, the colonial traffic was diverted over Turkey to Sarajevo and from thence farther on to France, and later to Hungary, Germany and Italy, or even over Split and Dubrovnik to England. Then the first bourgeoisie of Sarajevo developed from the ranks of well-to-do Christians and Jews who had their own business district in the so-called Churchiluk (furriers' district).

Under the influence of European Powers the Central Administration took steps in the second half of the 19th century which were an outgrowth of capitalism and industrialization and which seriously damaged the structure of the Charshiya. The finishing blow, however, received the Charshiya when the feudal society of Bosnia broke up.



Shopping centres — situation

MANUFACTURING METHODS

In the Charshiya the production was planned and organized. The Charshiya was made up of artisans specialists each of which was allowed to manufacture only one definite article so that we might compare the work done here with that on the assembly line. A blacksmith, e.g., made only horseshoes, bridles, chains, and spurs, akoltadžija only wooden frames for saddles, sara only leather saddles and suitcases for goods, and bags, etc. Thus, for example, a rider with his horse had to pass 14 different trades until both were completely outfitted.

THE GUILDS

In the following paragraphs we shall get acquainted with the development and structure of the various guilds formed in Sarajevo.

A guild was headed by the chehaya who acted as a middleman between the guild and the authorities.

His decisions were carried out by his assistant, the so-called chaush. The artisans were under the control of the kalfabasha who also kept an eye on the quality of the products. The guild's standard-bearer was called baryaktar.



Cobble stone streee (lane) and stores closed with shutters

These four officers constituted the board of the guild called londja. They convoked conventions at which the masters had the right of voting and being elected while the journeymen were only entitled to vote.

The membership of a guild was made up of masters, journeymen (calfai), and apprentices. The latter served their masters for 1000 days upon which they had to pass an examination to become journeymen. Master-ship was hereditary.

The guilds were managed on the basis of unwritten laws and traditional usage by which their management, as well as their relation to the authorities, masters, journeymen and apprentices, were clearly defined.

The main objective of a guild was to see that the quality of the products was satisfactory and that competition did not exceed the legitimate bounds. The coercive measures adopted by a guild for forcing a member violating the regulations to desist, were flogging, closing of the shop and a curse bestowed on the malefactor.

Each guild kept a record (tefter). Therein they recorded their masters, their sons and gradsons, journeymen, apprentices, sometimes also the expenses for guild's events, and the like.



Tanneries, for skin washing on the Miljacka — These small structure are kiosks on piles

The guilds were military-feudal organizations the members of which were paid soldiers from whose ranks the janissary nobility was recruited.

These associations of tradesmen grew simultaneously with the development of the trades. In the 15th century only such trades flourished which, in one way or another, had to do with military activities. At that time no guilds were formed. The growing demands of the feudal lords and the introduction of money as a medium of exchange in the 16th century, gave rise to the development of other trades and, eventually, to the establishment of guilds. In the 19th century, however, when the Central Administration began to issue such trade regulations which were the aftergrowth of capitalism and industrialization, the strength and industrialization, the strength of trades and guilds began to wane.

Making comparison between such a production and the methods of manufacturing in a contemporary factory, we can see that both originate from the same principle of division of labor, the only difference being that in a factory everything is mechanized and industrialized, while manual and handicraft work was dominant in the charshiya.

In the dispute between the Central Administration and the feudal lords the guilds sided with the latter. The heads of guilds having often been active



A store in front of another store, a store within a store

leaders of revolts and riots, the Central Administration decreed that the officers of the guilds should be appointed only with the consent of the authorities. Thus the liberties of the guilds were greatly curtailed.

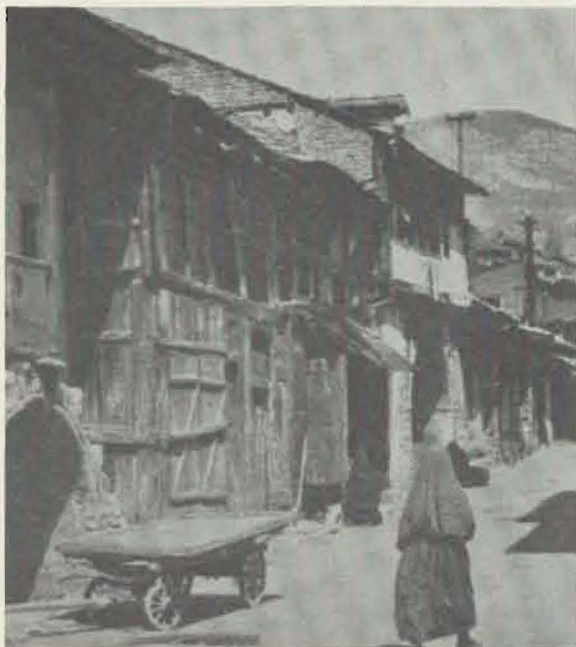
TRGOVKE (SHOPPING CENTRES)

As we have seen in the foregoing chapters the Charshiya began to take definite shape toward the close of the 15th century. It was laid out around the more monumental buildings and that, in the main, on the right bank of the Milyatska River. The business area was crisscrossed by 30 streets and narrow short streets called sokaki. The trend of the main streets was towards mosques, that of the sokaki towards fountains, wells and weighbridges. On either side of the streets were shops and storehouses.

In the Charshiya itself no vehicle traffic was allowed. All heavy traffic was diverted to the outskirts of the Charshiya.

All the streets were paved for easier cleaning.

In contrast with modern business areas aspiring upward, the Charshiya spread only in the horizontal plane. Its horizontal character, however, was



**Stores, closed with čefenki
— wooden folding
shutters, in Halaci**

enlivened by minarets and poplars rising like white and green pillars toward the sky.

During the opening stages of its development the Charshiya was occupied by artisans who, at that time, were also merchants. With the further development of business activities, however, a line was drawn between manufacture and commerce with the result that the artisans gravitated to their own areas while the merchants laid out their own districts. The tradesmen stuck to their original wooden workshops, the merchants, however, began to build the new stores and storehouses of stone.

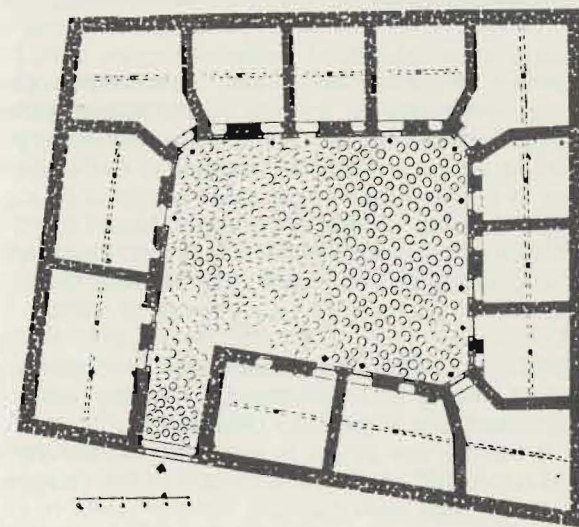
It is interesting to note that the most rationally utilized area in the Charshiya was that in which the workshops, stores and storehouses were located.

In the beginning the storage rooms were usually connected with the stores, but later separate storage buildings were built in areas set apart for these structures. There were also large common warehouses for inland commerce. These were either separate structures or were located on the first floor larger hans.

The shops were usually built of wood or bricks hardened in the sun (cherpich), while the storage rooms behind them had fireproof ceilings and iron doors.

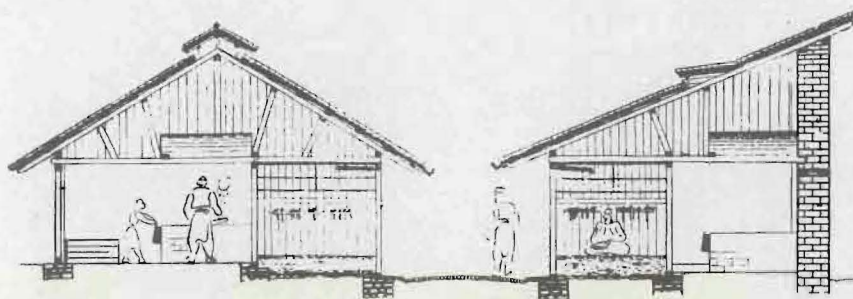


Magaza — storehouse with verandah on the upper storey

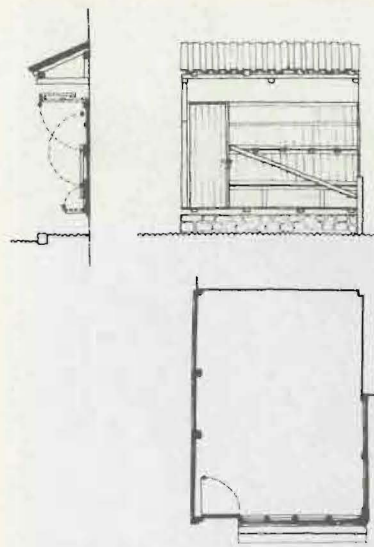
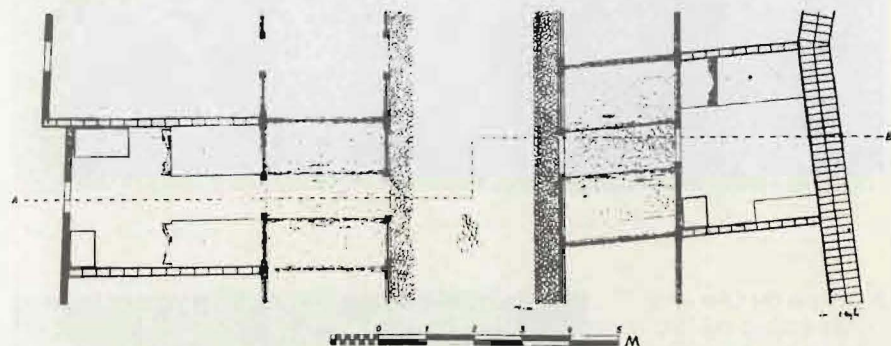


**Daira — common
storehouse in Halaci**

Cross section



Ground plan



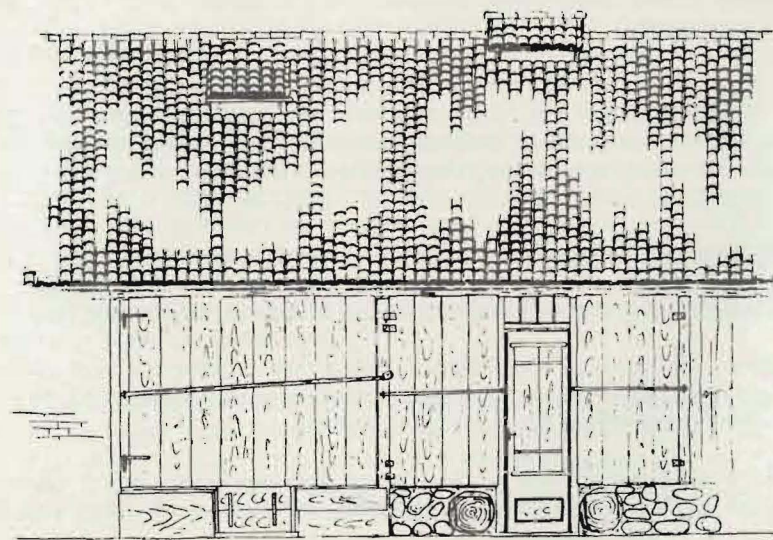
Cross section and Ground plan

0 1 2 5m



Coppersmith in his store

The floor space of these shops was from 6 to 10 m². The whole structure rested on stone blocks with the floor well above the ground so that there was no danger of its being flooded in time of high water. Projecting out from the main wall were the eaves under which there was a small bench. All along the front ran a window provided with shutters each of which had two wings, one opening upward and serving as an extension to the roof, and one opening downward and serving as an extension to the bench. The shutters were fastened with bolts and locks.





THE CHARSHIYA AND CAPITALISM

The article offers some thoughts taken from a similar article about the former Yugoslavia.

Soon after the Austro-Hungarian occupation the guilds began to show signs of disintegration the result of which was general competition and exploitation. In the wake of these came chaos and a state of confusion and disorder which soon were reflected also in the architecture and town-planning of that time.

With the growth of that part of the town which developed under the influence of European architectural concepts, the business center gradually shifted westward and the Charshiya began to lose its former significance.

Whenever a house was destroyed by fire a new building was erected in its stead, a tall building the naked walls of which were at variance with the neighboring houses and the width of the street.

In an attempt to remedy the acute housing shortage each vacant room in the Charshiya was turned into a habitation, the exterior of which was all but pleasing to the eye.

Trading in the Charshiya





Life in the Charshiya

The beginnings of exploitation could be first seen in the so-called »kre-
veti« (a store in front of another store) (under-the-counter), where handi-
crafts could work on their hunkers only.

Europeanization of the workshops led to the introduction of chairs which
relieved the artisans from squatting on the floor. The mangal at which he
warmed his hands was exchanged for a regular stove, glass partitions
divided one part of the workshop from another, and industrial tiles super-
seded shingles on the roof.

Yet the hygienic conditions were unbearable. All over the Charshiya ruins
were scattered of old burned or derelict buildings infested with vermin and
reeking of mold and rot. In short, the Charshiya became a slum.

Now let us consider the opinion of those who were directly concerned
with the modernization of the Charshiya — the physician, the fireman, the
insurance agent, the businessman, and the artist.

Already before World War II the physicians pointed out that rheumatism,
sciatica, tuberculosis and such like diseases were mainly due to the fact
that people lived in drafty houses with thin walls and leaky roofs, and
inhaled the bad air rising from the Charshiya.



Modernized store, closed with a glass screen

The firemen pointed to the wooden buildings which threatened whole
districts with fire.

The insurance agents again considered the rather primitive locks and
bolts with which the shutters of the stores were fastened, as inadequate
measures against burglary.

The merchants and artisans complained that they could not bear the brunt
of, let alone compete with, modern industrial production. With the intro-
duction of new manufacturing methods utilizing more and more complex
machinery, the question was raised what should become of handicrafts
which could not keep pace with modern factories. Today, of course, it is
clear that with the rising standard of living also the demand for handmade
articles will increase and that, consequently, at least some of the handi-
crafts will continue to flourish.

And now let us harken to what the artist who was looking in the Charshiya
for artistic incentives, had to say. His disappointment in the Charshiya
grew from day to day, because all he could discern in it was a medley of
makeshift patterns which had nothing to do with reality. It could not be
denied that the Charshiya had a tradition, but it was equally true that
there was no will to reconcile the old with the new.

In the face of the foregoing disclosure one cannot choose but admit that the necrotic process has advanced so far and so deeply that only the total extirpation of the diseased parts might save the Charshiya. It has been suggested to pull down all old and delapidated buildings, to divide the Charshiya into areas of high and of low buildings, and to lay out parks among them.

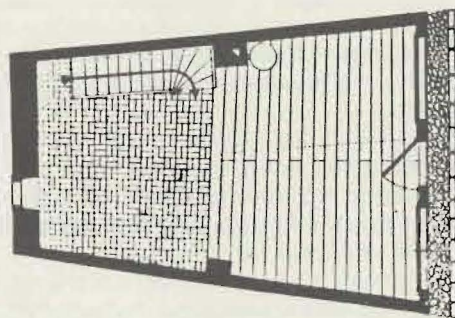
Those directly interested in the Charshiya objected to the plan maintaining that its realization would be uneconomical. Furthermore, they bolstered up their case with many a sentimental argument. It is, however, obvious that their reasoning missed the point because no plan can be considered uneconomical if human life and happiness are at stake.

With the new socio-economic make-up of the country all the above arguments lose even that little foundation they might have had. The present-day Charshiya is no longer the business center of the town. The social requirements of the new era necessitate a readjustment of the Charshiya to the demands of modern man. The town will have to have its cultural center and the old architectural values will have to be applied when the new town is planned. It will be necessary to activate the Charshiya so that it will, remodelled and reconstructed, meet the requirements of the new man, town and society.

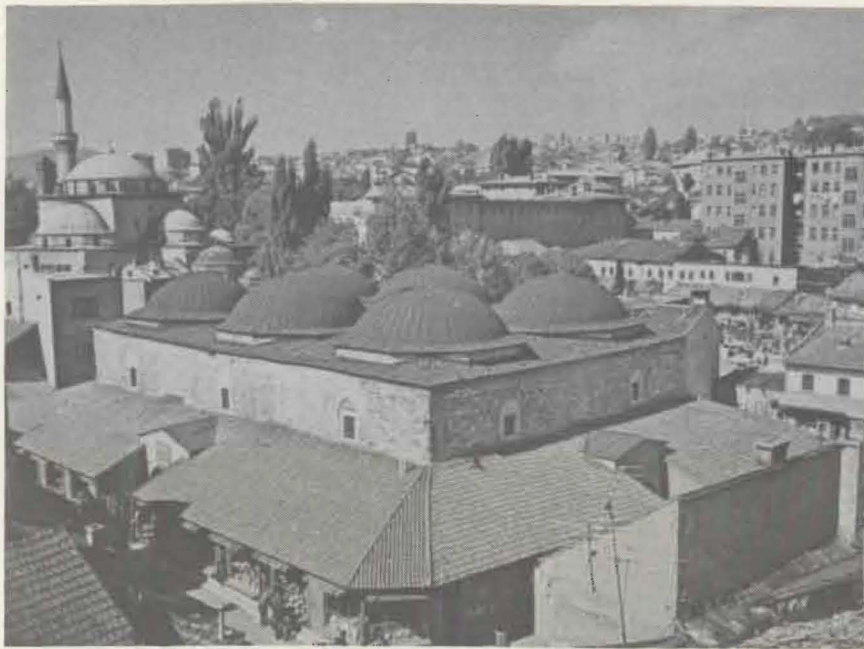
In that way there could be preserved and reconstructed three old constructions; the Brusa Bezistan and Taşlıhan in the Charshiya, as well as the Gazi Husrev Bey's Hammam behind the Cathedral.

Yet there should be first established their peculiarities to determine their new function.

Ground plan of a two — storied store



A two-storied store with a divhana — verandah on the upper storey



The Brusa Market Place — a view of the domes and stores around the structure (restored)

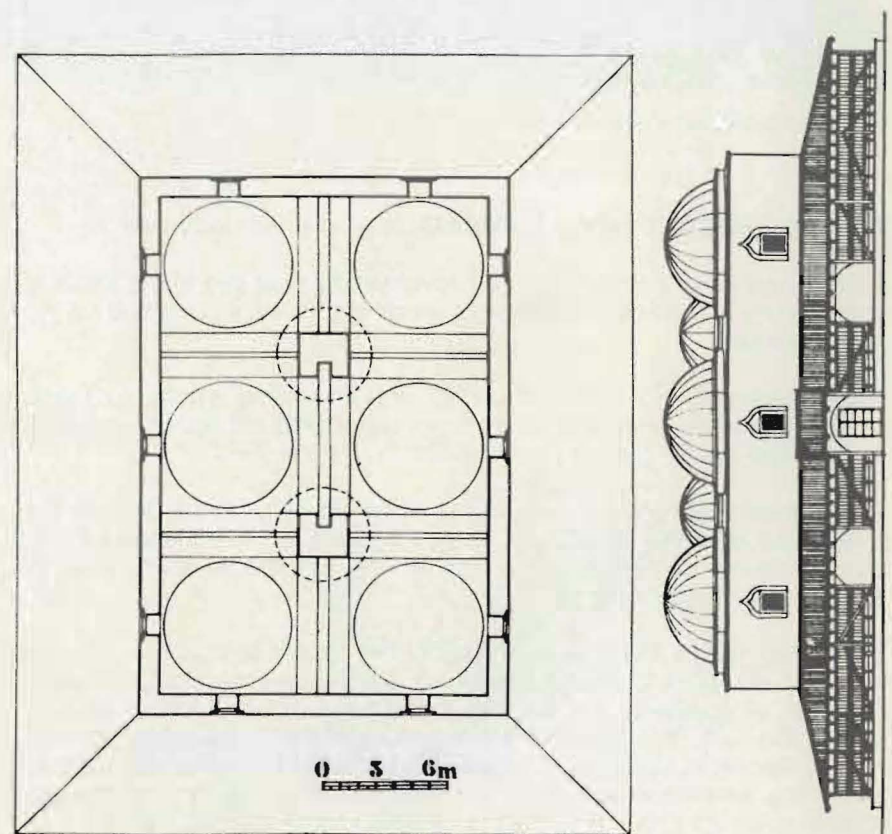
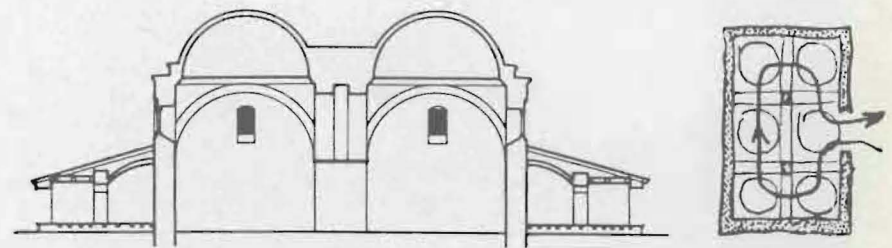
BRUSA BEZISTAN

The Brusa Bezistan has six domes arching in two rows over the interior, with two pillars between. In his spatial plastic art work this space is among the most beautiful ones, perhaps, of this kind in the country, but it is relatively badly lit. And as we have to avoid any solution requiring an alteration in the external appearance of the building, there should be found some purpose for which the space, in view of the existing bad light, could be most suitable.

As the building is dry and well preserved some suitable conception could be carried out without difficulty.

The building has been reconstructed to a store for selling oriental souvenirs.

The Brusa Bezistan — covered market place: cross section, ground plan, façade and a one-way street in the covered market





The entire steam bath, a view from below

THE GAZI HUSREV BEY'S HAMMAM

A hammam is an oriental bath. Its development was due to the sanitary prescriptions set down in the Koran, which in turn were prompted by the oriental climate.

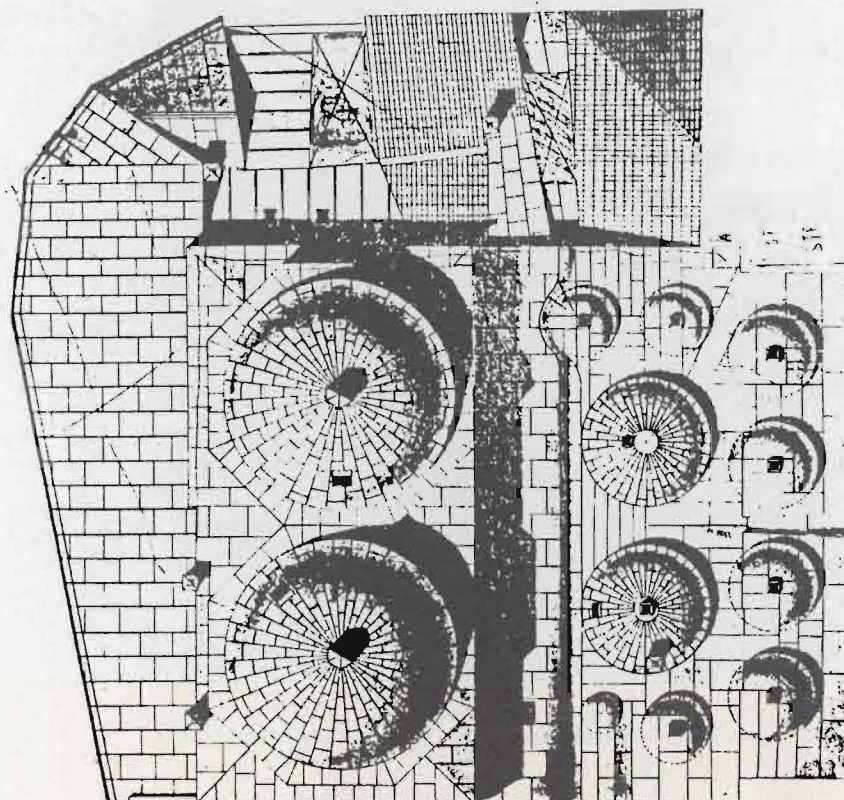
These baths of the Orient show so many features similar to those by the Roman thermae that it has been considered unnecessary to give here an exhaustive picture of all the details of hammams.

It is interesting to note that the farther northward we go in the Balkans the sparser become the hammams. Thus, for example, in Macedonia these establishments can be found in almost every provincial town, while in Sarajevo there exist only two.

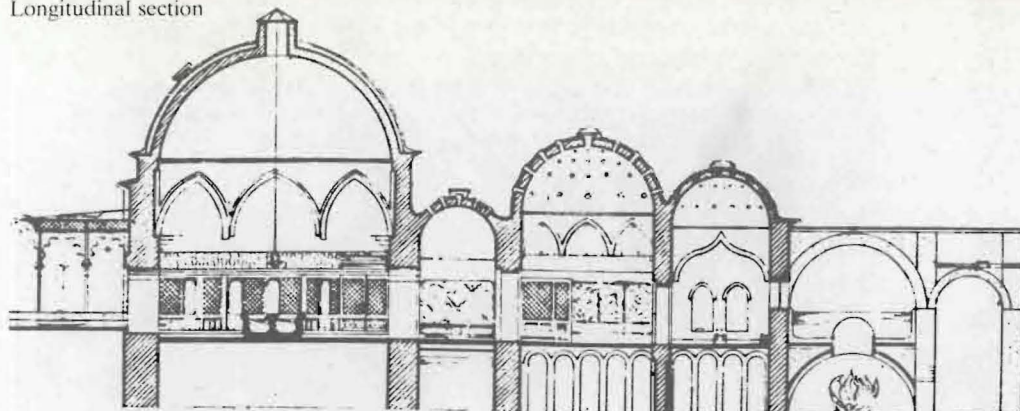
The Husrev Bey's Hammam consists of two similar premises — one for men and the other for women. Knowing one part we can easily conclude what the other one is like. Each of these parts has its šadrvan (apodyterium, fountain, anteroom in a bathing establishment) with a fountain and bathing boxes for undressing in summer, its kapaluk (tepidarium, room in a bathing establishment, in which patrons rest), mejdan (nuctorium, square massage room in a bathing establishment), halvats (caldarium, a

bathroom with faucets for warm water for pouring over, and the space for circulating and warming water under the floor, using the method of the Roman hypocausts and often also their own water supply, as the Roman thermae. All the rooms mentioned are vaulted, square, with domes, longitudinal rooms have trough vaults and are lit by the lanterns in the ceiling. The hammam has been reconstructed to a night club.

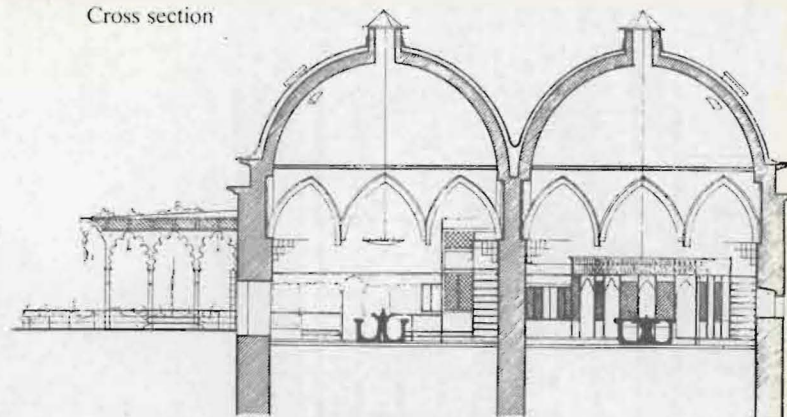
Gazi Husrev Bey's Hamam domes



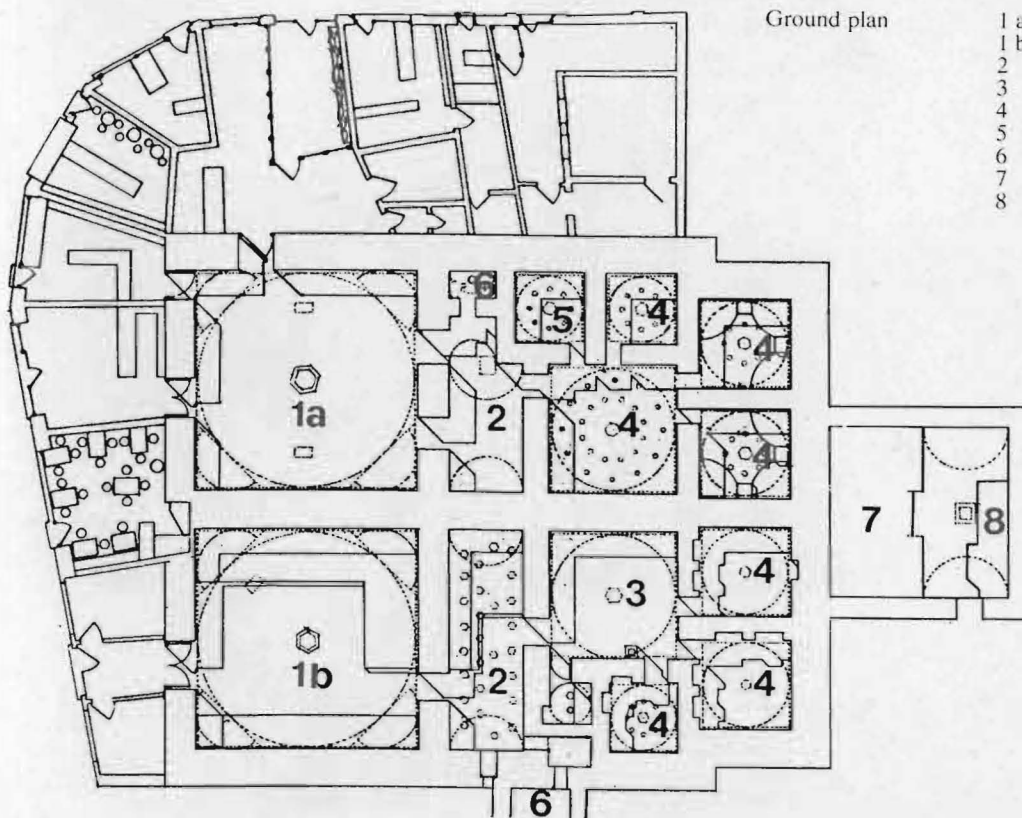
Longitudinal section



Cross section

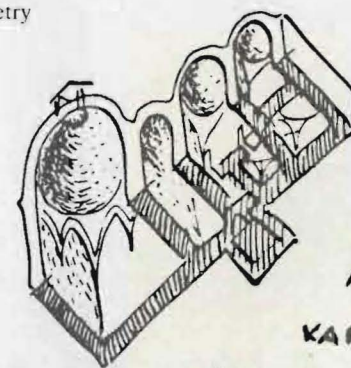


Ground plan

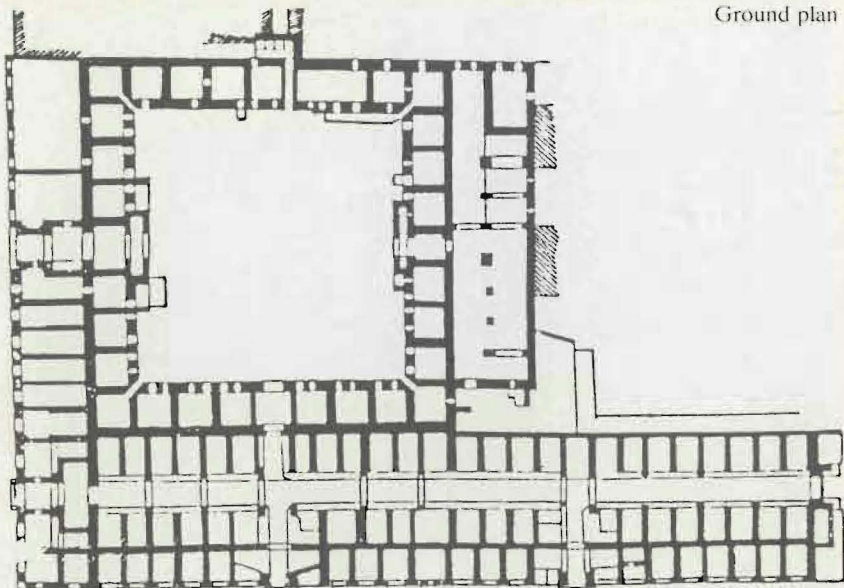


- 1 a šadrvan — men's bath anteroom
- 1 b šadrvan — women's bath anteroom
- 2 kapaluk — warmed up bathroom for men and women
- 3 mejdan — massage room
- 4 halvat — basement room
- 5 Jewish poole (for ritual washing)
- 6 čenifa — lavatory
- 7 hazna — fire-room
- 8 čulhan — place where ashes are kept

Aconometry



KALVATI
MEJDAN - HAVZ
KAPALUK
ŠADRVAN



Ground plan

TASHLIHAN

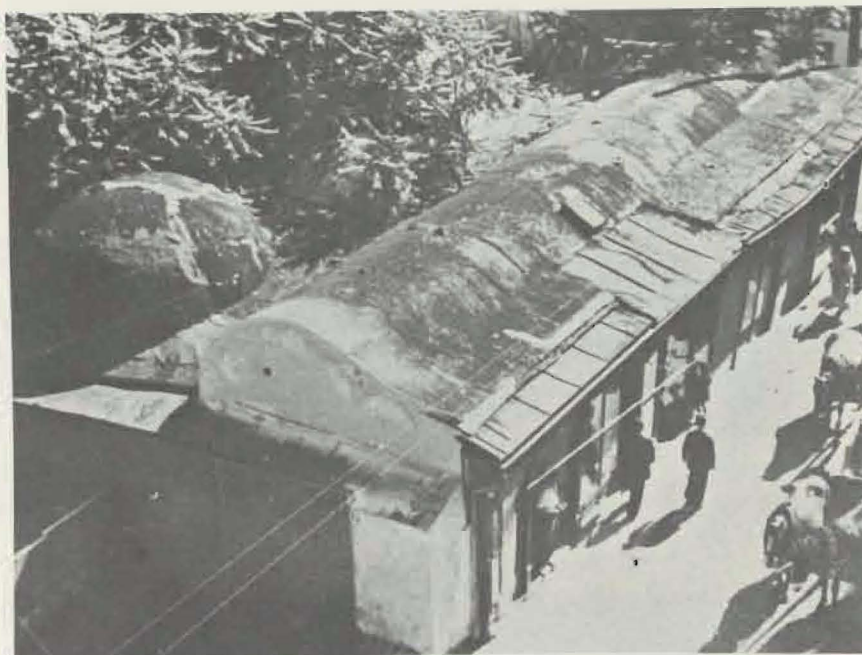
The building is in a very bad condition. Originally it consisted of an atrium, a hostel and a covered oriental bazaar. The hostel was pulled down already during the Austro-Hungarian occupation.

The bazaar is an oblong structure with an arched nave on either side of which are one or two rows of vaulted recesses in which merchants have their stalls. Two entryways divide the structure in three parts, each of which can be used as an independent unit.

The southern façade of the building is made up of small stores with three cupolas and a curved roof. In the northern façade the entryway is developed into a pointed arch which together with the Bey's Mosque and Clock Tower, affords a most picturesque setting. The construction is a sort of a buffer between the European part of the town and the Charshiya.

Since the building is slightly sunk into the ground the rooms on the ground floor are cool and would lend themselves to being utilized as barrooms or wine-shops. The recesses on the western side opening toward Bey's Mosque, could be used for the same purpose, while the southern part of the building could be connected with the terrace of Café »Europe«.

Restoration works, however, will have to be carefully planned in order to preserve the historical features of the building.

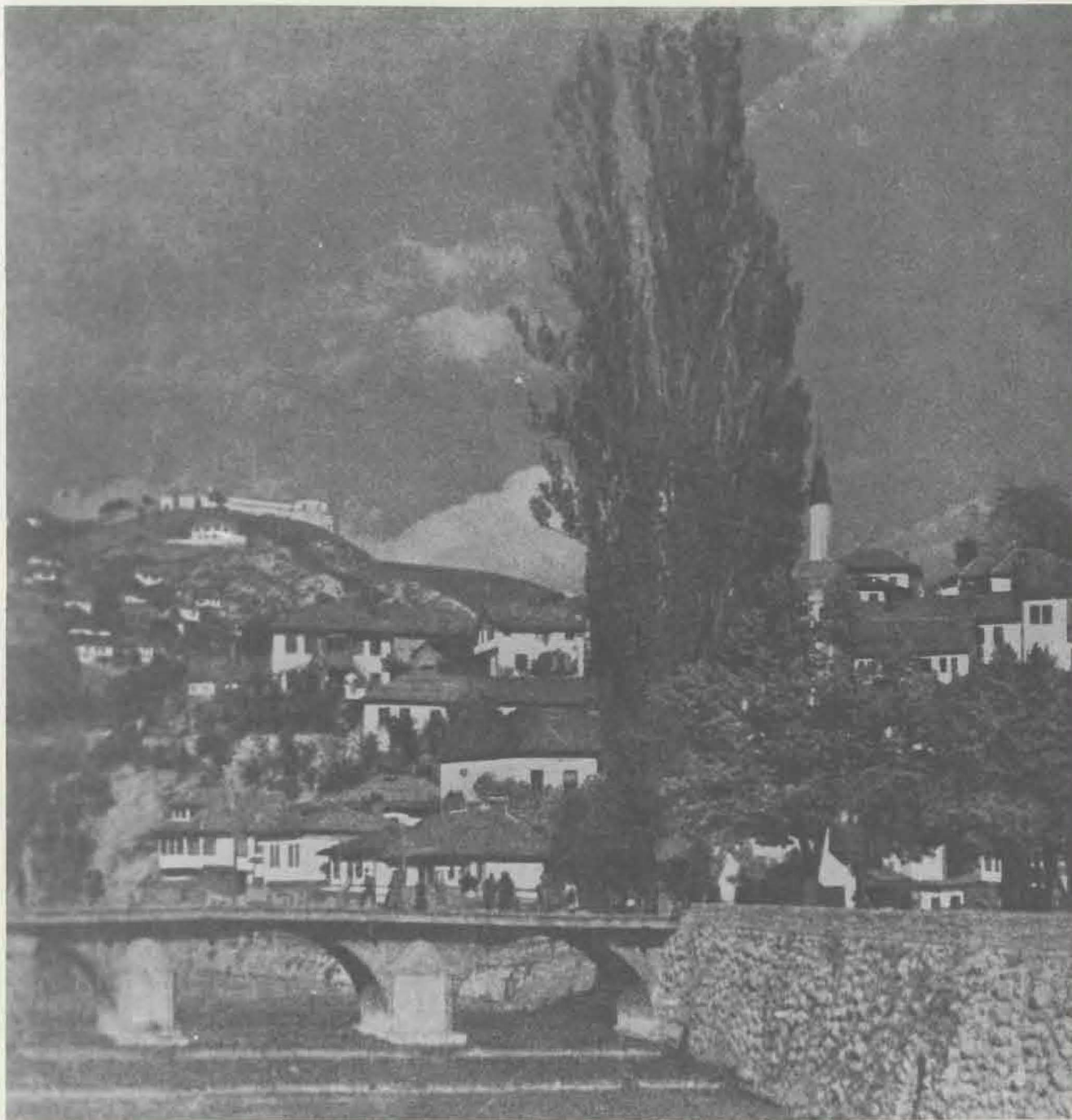


Tashlihan — hotel, built of stone a view of the domes and of a barrel vault (ruined)

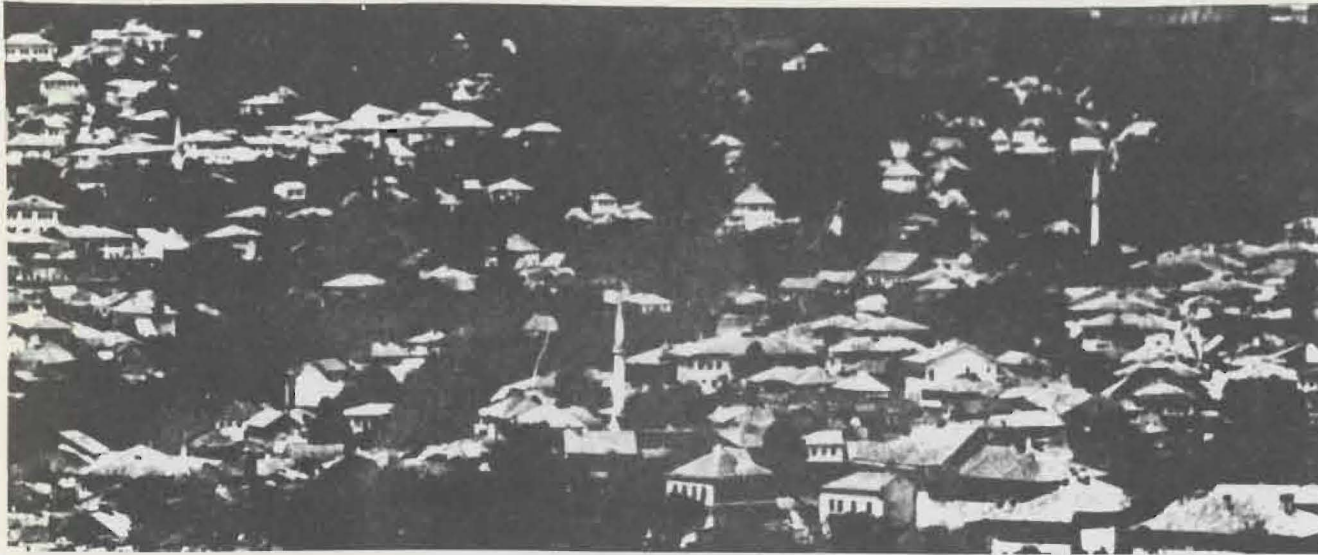


Interior of Tashlihan

THE MAHALA



Alifakovac — Mahala's amphitheatrical position



Mahalas on the slopes

THE MAHALA

Residential area (Neighborhood units)

Oral tradition has it that soldiers had built a fort on the hill with a view to protect the settlement in the valley where artisans and merchants had laid out the Charshiya. As time went on a regular road was built from the Charshiya to the fort. Then other paths and roads began to branch off, on either side of which houses were eventually erected.

In this manner then originated the main road or kitchma, the streets or sokaks, and the cul-de sacs or chikmas. The houses were arranged in zigzag patterns so that each of them commanded a vista of the Mahala and the Charshiya.

As soon as some 40 or 50 houses and a mosque were erected along the road, the settlement became a Mahala whereupon a fountain, school, coffeehouse, bakery and greengrocery were built around a square or market-place.

From this beginnings Sarajevo eventually developed, the town of 99 Mahalas with 99 slender lofty minarets around which white houses cuddle like lambs round their dams. And the Mahala is crisscrossed by innumerable snow-white cobbled streets glittering in the sun and dazzling the eye.

THE STREET SYSTEM AND BUILDINGS

The town of Sarajevo is made up of the Charshiya located along the Bosnian Road in the valley and the residential units, the so-called Mahalas, deployed on the adjacent slopes.

The residential unit again is composed of two areas, one static or private with houses amid gardens and courts, and the other dynamic or public made up of streets and paths leading from one house to the other.

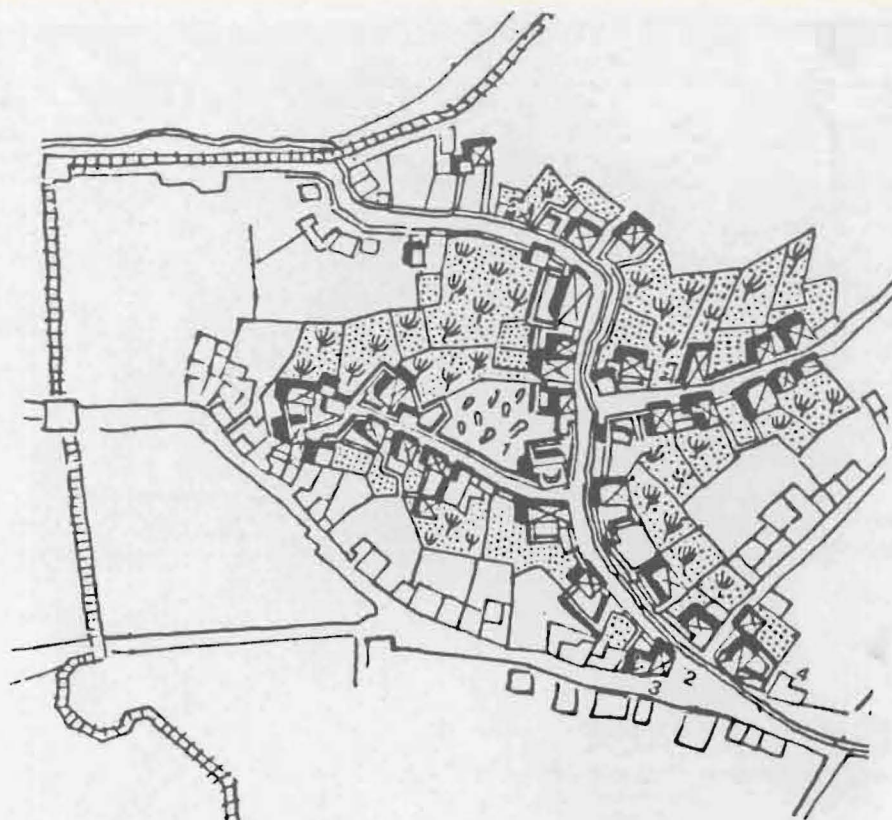
A Mahala developed in the following manner: first a house was erected and a path laid out to it and farther on to other houses. As soon as some more houses were erected near by, one of the well-to-do residents made possible the erection of a mosque and school, an aqueduct and fountain were constructed, and eventually a baker and a greengrocer opened their shops in the settlement. Thus all the residential area is composed of such neighborhood units.



Mahala mosque



Mahala — residential area on the slopes — Vertical and horizontal staggerings of houses



TOPAL INHANOVA
MAHALA

LEGENDA:

1. DŽAMIJA S POIKOPALIŠTEM
2. TRG
3. ŽOLA
4. PEKARNA
- ☒ 40 HIŠ
- ☒ VODNAK
- ☒ KAVARNA
- ☒ SADOVNAKI
- ☒ ZELENJAVA
- ☒ ŽIDOVI
- ☒ MESTNO OZIDJE

Topal Inhan Mahala, a typical sample of mahala's structure — micro-quarters with all the necessary structures

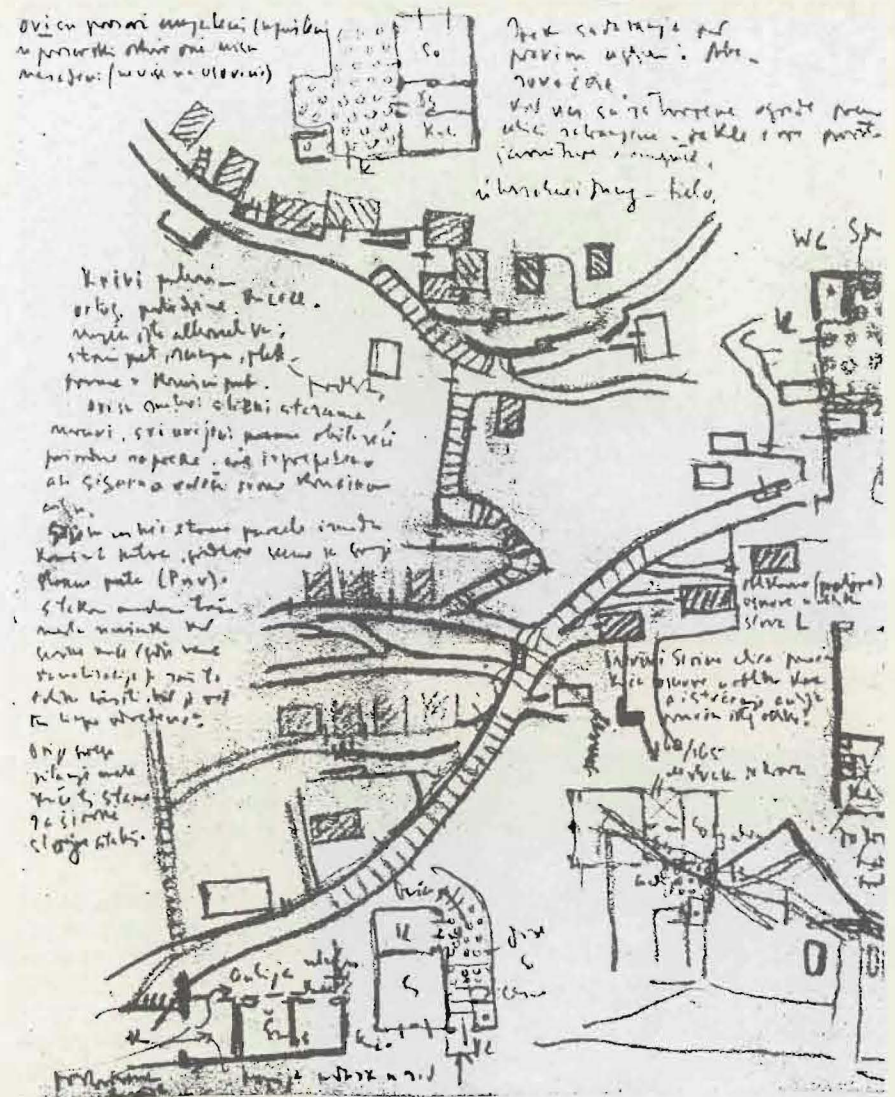


Cobbled staircase-like street leading uphill

DIFFERENTIATION OF STREETS

The streets leading through the Mahāla conform to the configuration of the ground. Every Mahāla has its own gently inclined main road — the spine. Then three other different kinds of streets can be found: sokaki (sg. sokak) which are winding streets following the contour lines, steep paths connecting sokaki, and chikme (sg. chikma) leading to the single houses.

Thus the street pattern is very similar to that encountered in modern settlements. The only difference lies in dimensions and the means of transportation utilized in the mahalas. In the past no vehicles were used for transportation. Thus the streets were only for pedestrians and pack animals. The width of the street was determined by the space occupied by a man and his pack animal. The width of the spine is about 19 feet (a man and two pack animals), that of the sokaki is about 8 feet (one pack animal) while the foot paths leading to single houses are only about 7 feet wide.



Plasticity of an uphill way



Çikma — a short blind alley, full of gates

THE RELIEF

The street pattern shows a similarity to a branching tree. At the points at which the main streets branch out mosques, stores and fountains will be found. The houses are arranged in echelon or step form. The plane of the gates leading to the yards in front of the houses, is at right angles to the cobbled street whereby attractive vistas are secured. To this purpose stairs were laid out to these gates.

The narrow paved strip running under the overhanging second floors, does not seem to be a sidewalk, but merely a curb protecting the house from water.

Often between the street and the houses a brooklet was running across which led simple plank bridges. Sometimes a strip of grass cut up by walks and studded with bushes and trees was left between the street and the houses.

All these paths, gutters, brooklets and pavements show with what a vivid imagination landscaping was carried out.



A street, for pedestrians and horses only



The Bardakčije Mahala fountain

SCULPTURE

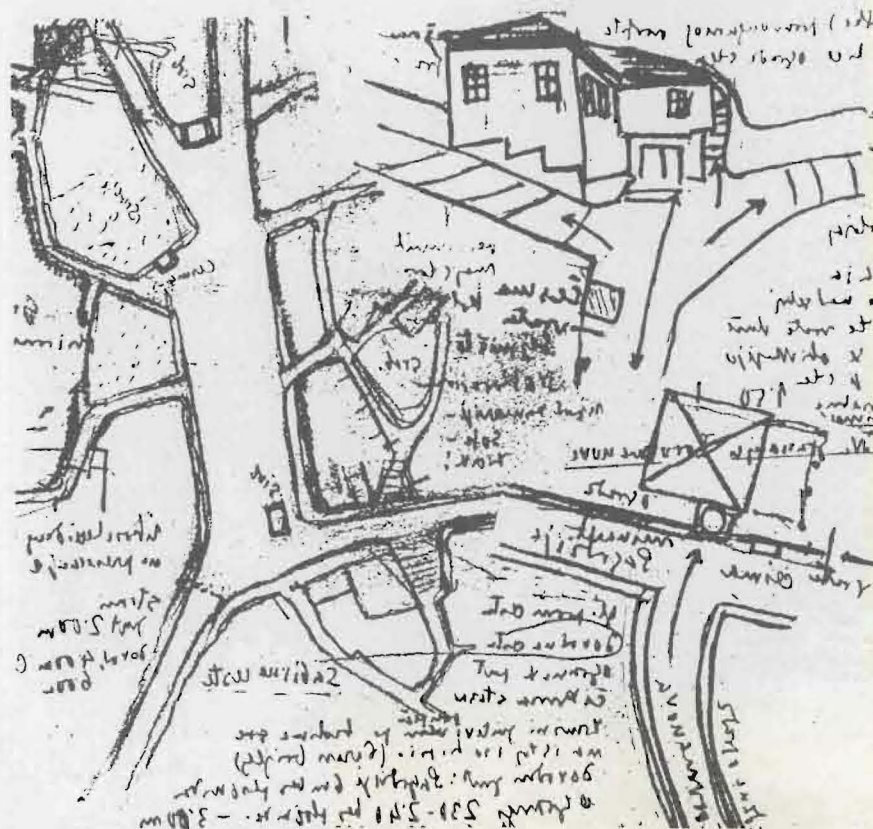
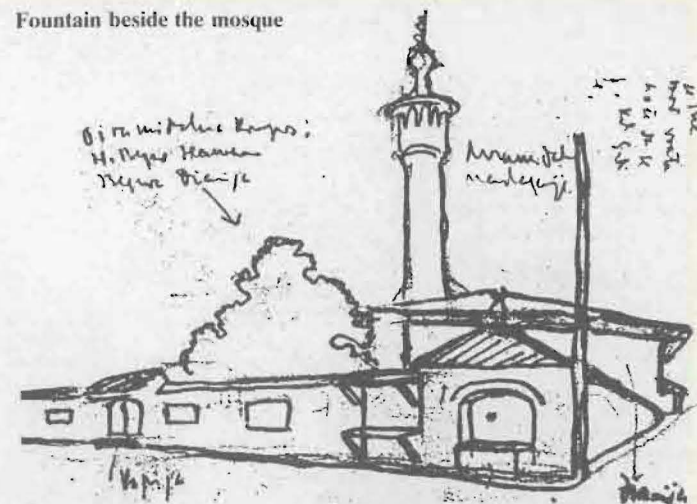
Since in the Orient water is highly valued it is only natural that the fountain was the center of the Mahala. Many streets were named after the fountains located in them.

The fountain, or chesma as it is called here, is a cubistic sculpture of stone. It has a standard form. It is usually found in front of a mosque, house, baker's shop, in the middle of a street, or at street crossings. There are innumerable attractive places for such sculptures in mahalas which cannot be found in the corridor-like streets of western cities.

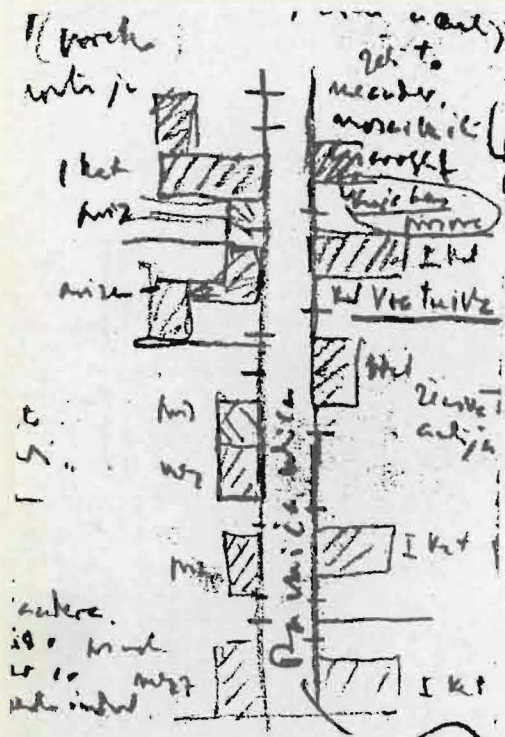
Another remarkable feature of the street is the doksat. This is a sheathed and plastered prism with windows jutting out in the height of the second floor of a house and overhanging the street. This is a standard structure as are the fountain and the gate in the streets. First of all, these doksats are found at street junctions.

The doksat is a plastic feature of the Bosnian house the counterpart of which did not develop in Western Europe. Originally the houses stood perhaps isolated. Yet with the growth of the Mahala they were interconnected with the walls of courts and other structures with the result that they formed a plastic whole similar to a honeycomb. Walking along the

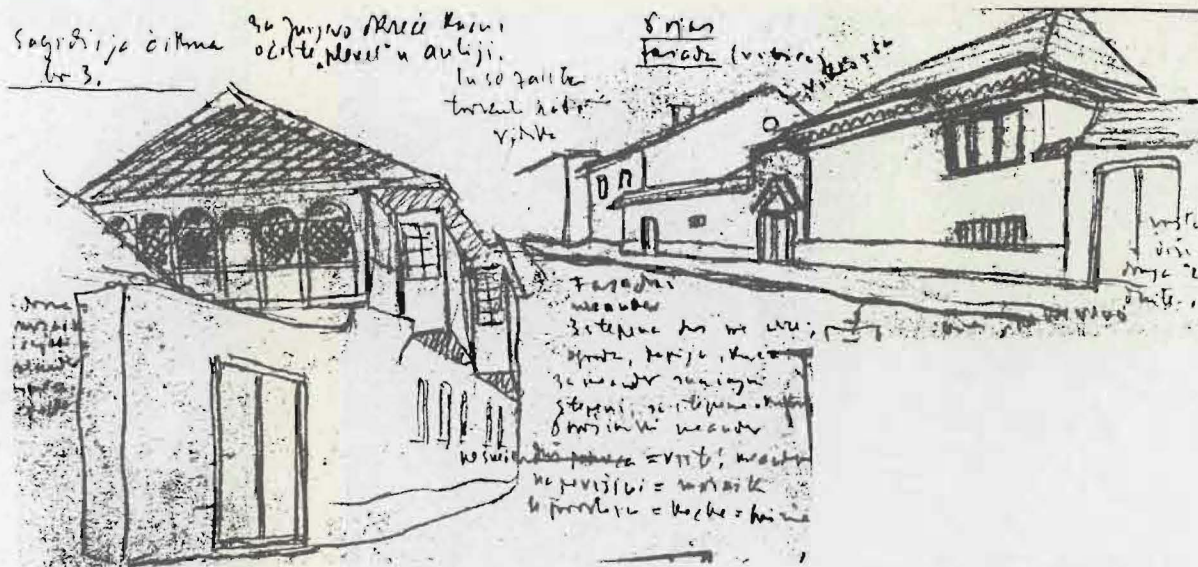
Fountain beside the mosque



Fountains' position alongside the streets



Vertical staggering of houses

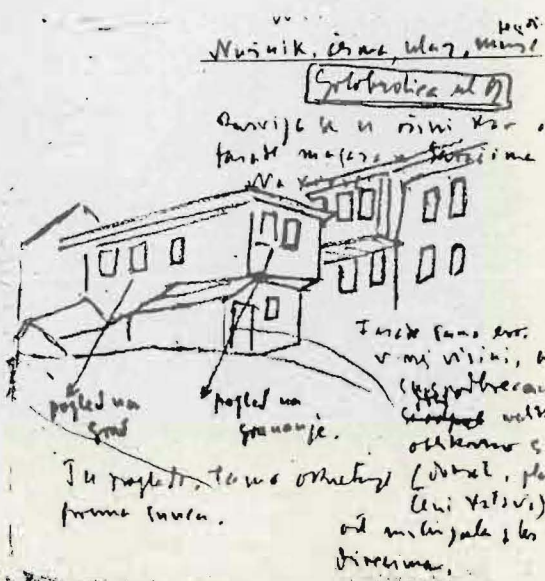


A house wound by the lane from below

Courtyard walls tying up houses in sculptural wholes



Horizontal staggering of houses



streets between windowless walls and bolted doors, one rarely encounters a living soul. Yet one is acutely conscious of the throbbing life, peering eyes, and whispered words behind the walls and on the second floor. The inmates whose activities are confined either to the enclosed courts or their winter quarters, are, nevertheless, afforded views of the environments from the windows on the second floor overhanging the street.

The pavilions are connected with the streets by the courtwalls, but behind them they freely recede, advance and evade one another in order to command the most favorable view of the surrounding landscape. In connection with the streets and courts, the doksats and pavilions give the impression of positive pictures among negatives. The spatial pattern is basically different from that encountered in Western Europe where the houses are rigid positive pictures among utterly unflexible and schematic channel-like streets.

The doksat is a typical feature of houses built on slopes and along winding streets with the first floor walls following the curve of the street and the second floor pavilions infinitely changing the orientation and interrelation. In contrast with straight streets the winding affords a flexible pattern full of fine orthogonal views. Behind each curve a new scenery opens before



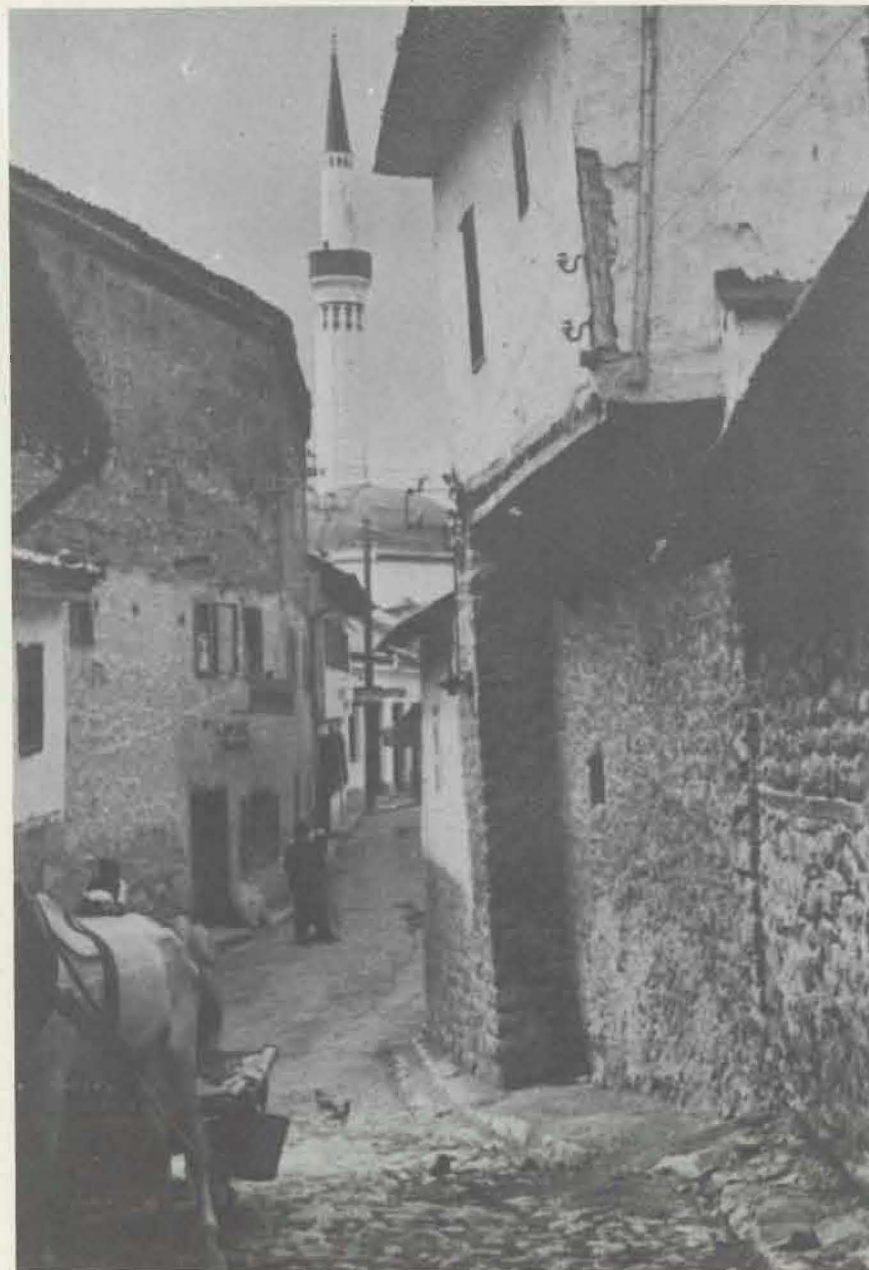
Staggering of the houses in Radnicka Street, on the upper side the houses have been built high and on the lower one low.

the eyes of the walker. One marvels at how it was possible to contrive such a variety of patterns by utilizing a few standard elements as are the fountain, gate, doksat, wall, and roof. Although the street system in the Mahala can be compared with a maze, yet because of ever changing sceneries one will not get lost here as one might in a Western city where the streets and buildings are more or less uniform.

STRATIFICATION

In the foregoing paragraphs we scanned the sceneries opening during a walk along the streets. Now we shall go into the doksat whence we shall view attractive vistas. Furthermore we shall make an attempt to get an insight into the construction methods resulting from a desire to obtain fine vistas.

The oriental house is not oriented to the sun but to the vista wherein it is basically different from other European buildings. It is true that the first floor of the oriental house is reserved for winter quarters and enclosed with a court wall, yet it is equally true that the second floor liberally opens into the world. This fact exerted a strong influence upon the shape of the house, the Mahala and the town.



Layer of stony wall, second-storey porches and roofs in the Mahala street



Staircase-like construction alongside the steep streets of Alifakovac. A view of Mahala from below, and from above, from Mahala toward the town. (Behind, right, the former Town-hall in the Moorish style, an Austro-Hungarian heritage)



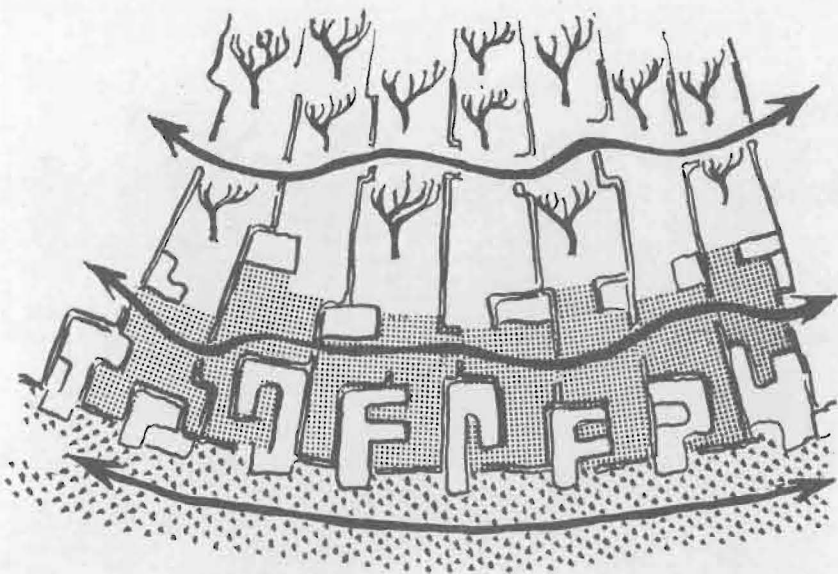
Alifakovac — Mahala's amphitheatrical position

The houses are placed so that each of them is afforded a view. On the slope above the street the houses are higher than on the slope below it, so that the tenants of the higher located house can have a view over the roofs of the buildings on the slope below the street. Where the street is very narrow the houses rise on the slope above it, while on that below only low walls are found. On either side of very steep streets the houses are arranged in step form.

Since one part of the street system follows the contour lines, the pattern produced by such an arrangement of houses is similar to that formed by the horizontal strata of slate.

The stratified pattern of the Mahala is effected by the structure of the houses themselves made up of layers of stone sockles, blind walls, doksats and lattices or the second floor, and roofs. On the other hand, this pattern is again due to the fact that the houses, doksats and roofs follow the contour lines. The houses pile one above the other with the result that their tenants view the town in the valley as from the seats of an amphitheatre.

The old town of Sarajevo was repeatedly laid in ruins. Yet after each calamity it was rebuilt in such a manner that it again showed the stratified pattern. It is true that the layout of the town displays no rigid planning, but



Komsimka — gate between adjacent gardens

each building was erected with great discipline, consideration for the neighbor, and a rare feeling for space and the configuration of the terrain.

The Mahala is a masterpiece of space moulding and a architectural Song of Songs for those who have an eye for beauty.

NEIGHBORLINESS

Oriental architecture is based on one of the fundamental precepts of the Koran which reads: »After Allah thou shalt love thy neighbor best!« This principle, articulated in a hundred different ways, is met with all over the Orient.

In order to understand the relation of an oriental to his neighbor let us listen to the following story told by Kreshelyanovitch: A man went to the Charshiya to do some shopping. When he found that the store in which he used to purchase the required goods was closed, he went to the neighboring store. The storekeeper, however, sold him only half of the requested quantity of goods, offered him a cup of coffee, and asked him to wait until the neighbor came back. »You wanted to buy the goods from my neighbor,« the storekeeper said, »and it is only fair to give him a chance to sell you the other half of what you need.«

There is yet another, no less characteristic, story about a man who wanted to sell his house and set the price at 300 ducats. When it was pointed out to him that it was worth no more than 100 ducats, he said: »Well, but you should not forget that to me each of my neighbors is worth 100 ducats!«

These two anecdotes illustrate the Oriental's attitude toward his neighbor, and reflect his deep conviction that a man left to himself is »bound to shallows and to miseries«.

In architecture this neighborliness brought forth the so-called komshipka, a gate in the wall separating adjacent gardens or courts. Paths leading across back yards to these gates enabled neighbors to visit each other without having to use the streets. Thus we can see that here the attitude to the neighbor was basically different from that assumed in the western countries where people shut themselves up behind mighty walls.

Neighborliness played a special role in the husband-wife relationship. An Oriental hid his wife from the world and shut her up in the house. Yet in the house itself he offered her whatever he thought might make her incarceration more endurable — he laid out marvelous gardens, opened a verandah on the second floor, or added to the house a doksat commanding grand vistas. The Oriental's propensity to give the house a graceful and showy appearance would certainly have led to braggartism and vainglory had it not been counterbalanced by his deep respect for the neighbor. It is, of course, evident that the echelon or step form arrangement of the houses was, in the main, due to the unselfish concern of the builders for the neighbors. The houses were terraced in such a manner that they did not obstruct the view from the neighboring dwellings. Hence the spatial pattern of the town, hence the amphitheater-like town-planning layout. There is no doubt that these architectural concepts were rooted in a world outlook which was deeply social. If it were possible to throw light upon the fundamental principles of this outlook, it would be much easier to gain an insight into this architecture before which we now often pause in mute admiration.



The Old Mahala of Sarajevo — its principles of construction should enrich also the modern one

THE MAHALA AND THE NEW DEVELOPMENT

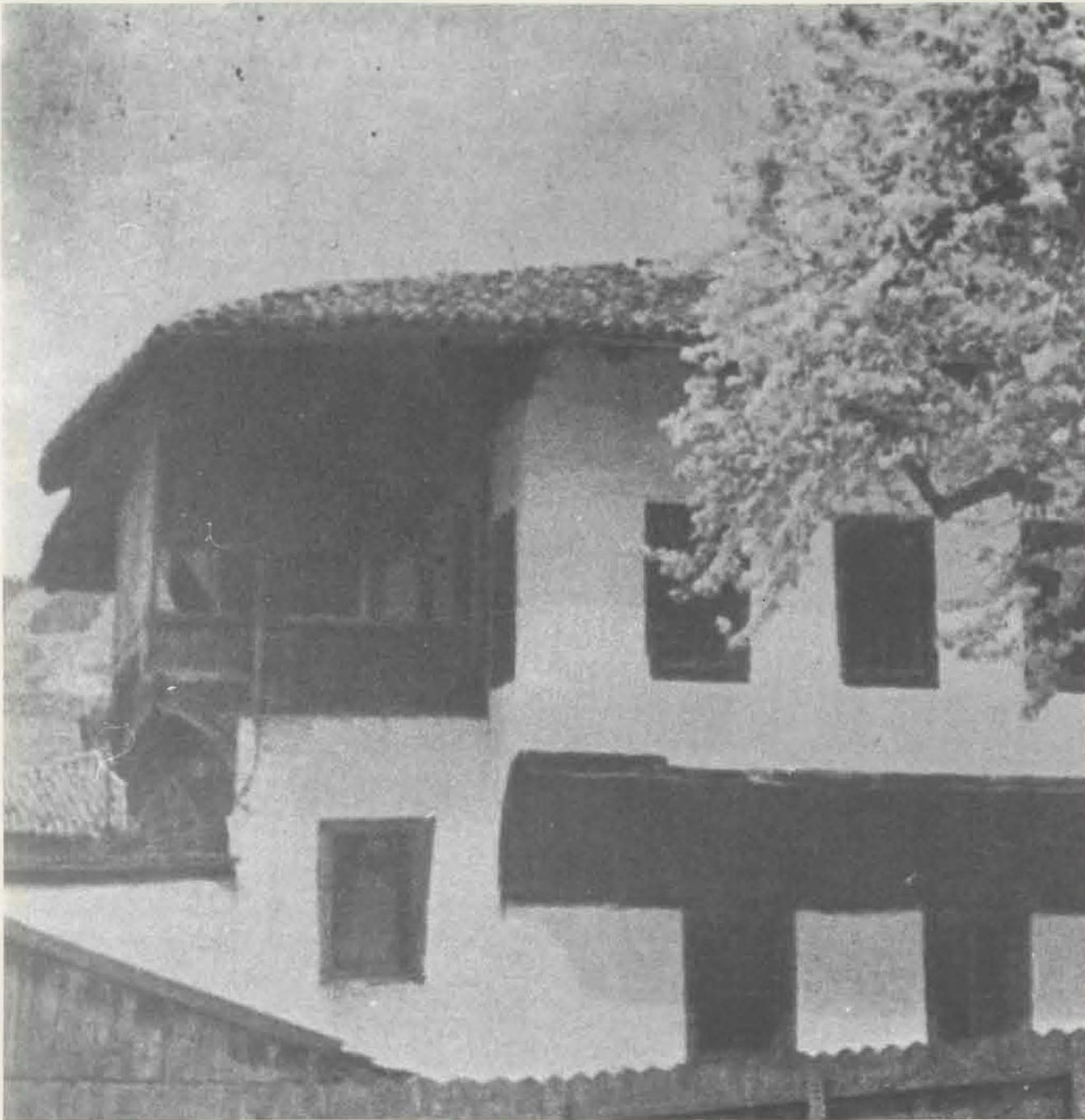
The difference between the old part of the town and the new development will depend on whether the latter will be laid out on level ground or on a slope. The new settlement, however, will have the same spatial pattern as the old one and will differ from it only in the organization and size of buildings.

Unlike the old mahala which consisted of a relatively small number of houses, the new neighborhood will represent a larger unit with its own center. The new social structure will demand a community hall, modern shops, a kindergarten, playgrounds, and the like. The development should be similar to those carried out in Illiyash, Varesh or Lyubiya.

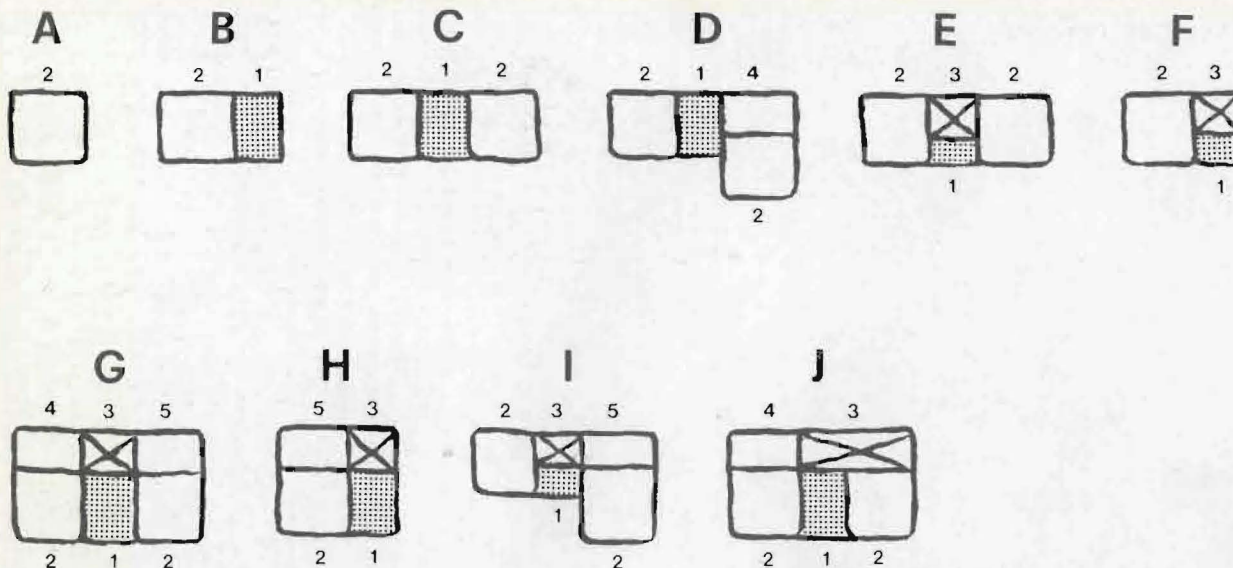
Instead of the former single-family houses larger units for 4 or 6 families should be constructed. These dwellings, however, should be designed in such a manner that each family would have a maximum of privacy. Each family should have its own entrance and garden. Such a design would steer clear of the features typical of apartment houses in which one entrance leads to several suites.

Furthermore, many structural forms found in old buildings could be advantageously utilized in the new houses, as, for example, the verandah, called divhana, on the first floor accessible by a flight of stairs, and covered with a tent-roof. The two-story dwelling houses should be arranged in such a manner that they would form with the one-story barns and sheds a spatial pattern similar to the teeth of a zipfastener. The principles of unwritten laws should likewise be retained: the dwelling should be proportional to man, each house should command a view, the structures should be cubiform and located amid gardens, and the whole spatial pattern should be preserved.

THE HOUSE



Saburin's House from the beginning of the 18th century



I. BASIC DEVELOPMENT OF THE OLD HOUSE OF SARAJEVO

- 1 hayat — anteroom
- 2 halvat — room on the groundfloor
- 3 mutvak — kitchen
- 4 halvatič — small room next to kitchen
- 5 hudžera — storeroom

THE HOUSE

I. THE DWELLING AREA ORGANIZATION

A. Individual Dwelling House

Sarajevo was a town of day laborers, artisans, merchants, and farmers. Each of them built his house in accordance with his standard of living, so that from the ground plan of a house the class to which its proprietor belonged can be determined.

On the other hand, again, we can see that all ground plans spring from the same basic dwelling unit consisting of a nucleus and plasm. Around the nucleus which shows a very uniform pattern, are placed several rooms the number of which depends on the tenants' living standard. Thus we can observe several kinds of ground plans. When, because of specific conditions, not all rooms could be developed, we can find a great variety of ground plans. This, however, had no influence whatever on the development of the pattern.

A. The basic unit is that consisting of a hall or hayat and a room called halvat. Here the hayat is the nucleus and the halvat the plasm. This also is the unit from which all the other more complex ground plans had

developed. We shall call it here the embryonic unit. This ground plan is asymmetrical. The house itself has neither a kitchen nor a toilet. Both are considered unclean and are consequently placed in the courtyard. The hayat developed housing culture rendered possible by the favorable climate.

B. There exist also ground plans with only one room called halvat or chardak. Yet also here we can see that efforts were made to develop at least an anteroom.

C. If to the embryonic ground plan referred to above another halvat was added then the ground plan became symmetrical: halvat — hayat — halvat.

D. If one of these halvats is pushed forward so that another small halvat or halvatich can develop behind it, an asymmetrical ground plan of a higher order is obtained.

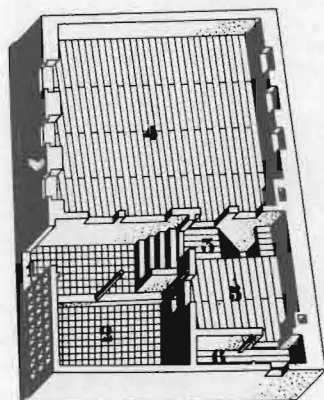
E. In a climate different from that of Sarajevo the hayat of the symmetrical ground plan was often partitioned whereby a small hayat and a kitchen called mutvak, were obtained. Here the kitchen extend up to the attic.

F. Such a mutvak can also develop in the embryonic ground plan.

G. It can likewise develop in the centric ground plan so that behind the hayat a small mutvak is incorporated within the house. In this case a

ONE-STORIED BUILT-IN ONE-FAMILY HOUSE WITH EXCENTRIC GROUND PLAN. HOUSEPAINTER'S HOUSE

Characteristics: atrium



Groundfloor

- 1 entrance
- 2 avlija — courtyard
- 3 anteroom
- 4 room on the ground floor
- 5 kitchen
- 6 čenifa — lavatory

halvatitch will be found on one side of the mutvak and a larder or hudjera on the other side of it. The layout is similar to that found in modern town dwellings where the larder and the servant's room are close to the kitchen.

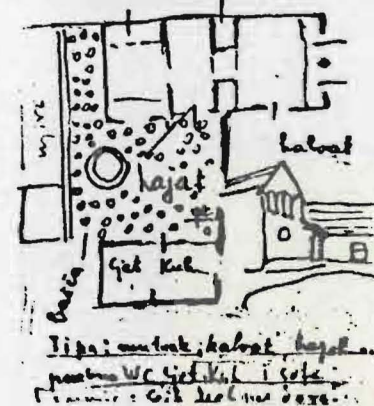
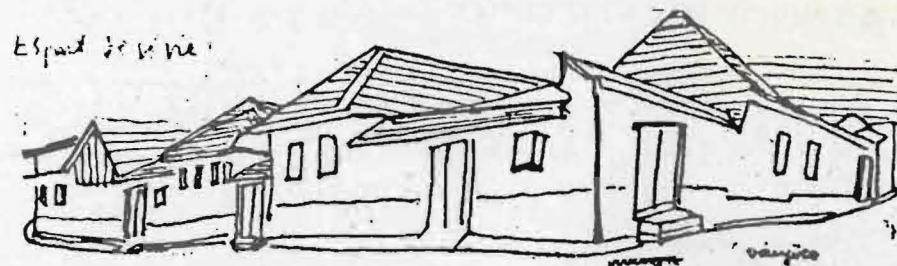
H. Such a mutvak and halvatitch can develop also in the embryonic asymmetrical ground plan.

I. A small mutvak can likewise develop if the hayat in the eccentric ground plan, is partitioned.

J. The mutva is offen found close to the halvatitch or the hudjera.

In this way then all the possibilities for a further development in the horizontal plane would be exhausted because a convenient and unobstructed entrance, good ventilation and adequate lighting do not permit additional rooms.

Further development, however, is possible on the first floor; yet this leads already to the development of separate summer and winter suites. Before, however, this could be done it was necessary to develop on the first floor a room corresponding to the hayat on the ground floor. Eventually the solution was found in the divhana, a verandah on the first floor accessible by stairs. The divhana is a roofed floor resting on pillars. The room on the ground floor under the divhana is called boshluk. Behind the rooms is the same as on the ground floor. The names of the rooms are, of course, different. The halvat of the ground floor has its counterpart in the chardak on the first floor. The part of the chardak jutting out over the ground floor is called choshak. A small chardak is called chardachich



One-storied small houses in Šeih Mehmed Street

anteroom, room on the groundfloor, kitchen,
lavatory, bower

and corresponds to the halvatic. Above the larder or hudjera is a closet in which clothes are kept. Above the mutvak is the dimluk through which smoke escapes. The hayat on the first floor, has usually a counterpart in the tecess of the divhana on the second floor.

Such a first floor layout can develop above any ground floor referred to above. The divhana is either in front or at one side.

The rooms around the divhana on the first floor are usually used in summer, those on the ground floor around the way at and mutvak, in winter.

The houses rarely rise higher than the first floor. There is no basement. Crops are stored in the so-called magazas — sheds built on the inclined ground. Woodsheds are always placed in the courtyard.

FOUR FUNCTIONS OF THE HOUSE

In the literature dealing with this kind of architecture we often encounter the view that the house is merely an agglomeration of rooms without any definite purpose. But a closer inspection of the rooms will show that this view is erroneous because the rooms are meant to suit various purposes which, of course, are different from those encountered in Western Europe. In the ensuing paragraphs we shall see that the rooms can be classified, according to their function, into four groups — those used for habitation, recreation, domestic activities, and circulation.

1. The Habitation

In the oriental house the halvats and chardak are used as rooms in which people live. In contrast to a West European room which is used for only one definite purpose (bedroom, living room, etc.), the oriental room is used during the day as a living or dining room and during the night as a bedroom. This is practicable because the rooms are fitted with a built-in setchiya (bench) and a partition called musandra behind which are a wardrobe, a storeroom, the bath and the entrance door. Such an arrangement makes, there is no doubt, for cleanliness.

If the house has two halvats, one is used during the day as a living room and the other as a drawing room. During the night, however, one of them becomes the parents' bedroom and the other the children's bedroom.

If beside the two halvats there is also a halvatchi then this is used as the maid's bedroom. If, however, the family keeps no maid then the room is used as a bedroom for the children of one sex while the parents sleep in one and the children of the other sex in the other halvats.

If the grand parents live in the house, they have their own halvats which, after their death, is assigned to the grown-up children.

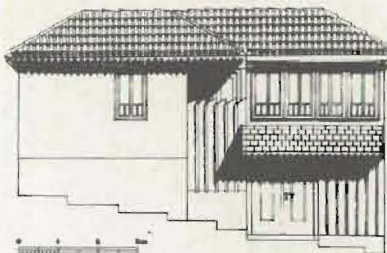
All these halvats are accessible directly from the hayat. The halvatchi and the hudjera (larder) are accessible through the winter kitchen.

In a two-story house the rooms on the first floor are generally used for the same purpose as those on the ground floor. The chardaks and choshaks are used as bedrooms for the parents, the sandukhana as a wardrobe, the chardachich as the maid's room and the divhana as a living room. In the dimluk through which smoke is carried off meat and fruit are cured.

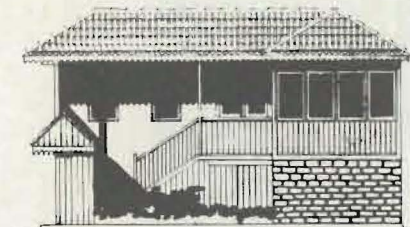
ONE-STORIED, PAVILION ONE-FAMILY HOUSE WITH CENTRIC GROUND PLAN — VELIKI KAČANIK

Characteristics: divhana — wooden verandah before the house above the summer kitchen

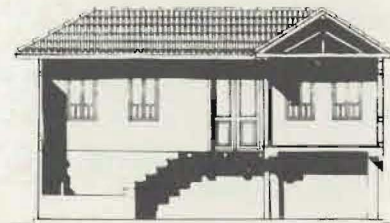
Side facade



Main facade

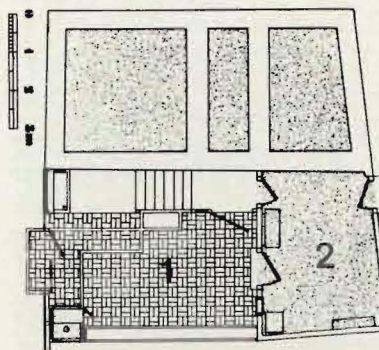


Cross section

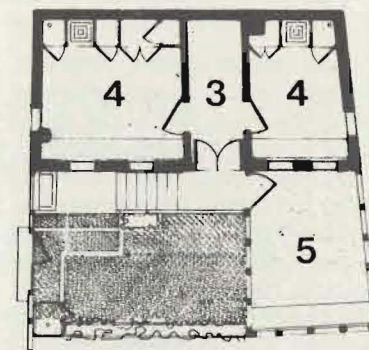


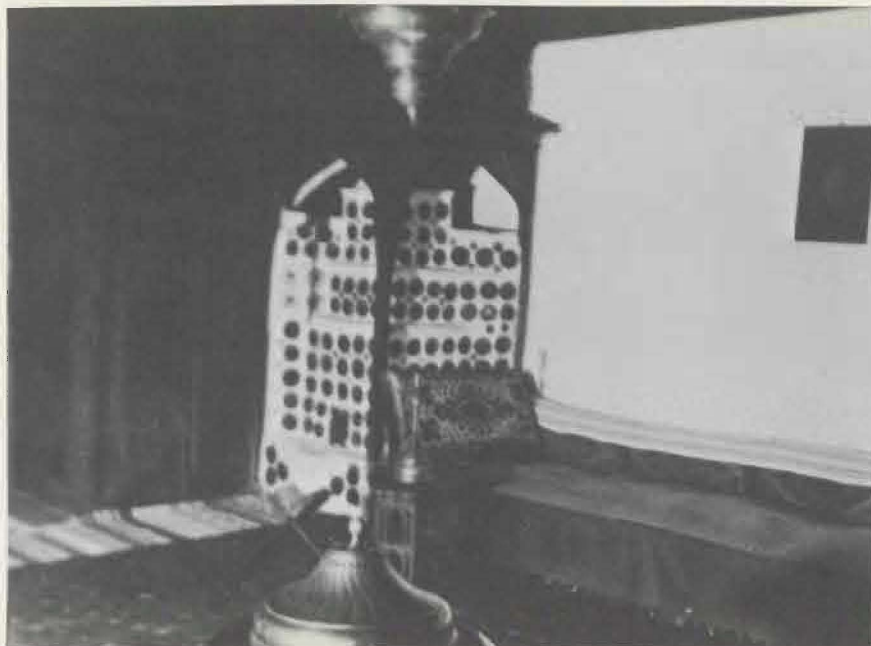
- 1 courtyard
- 2 summer kitchen
- 3 anteroom
- 4 room on the ground floor
- 5 divhana — verandah with stairs

First floor

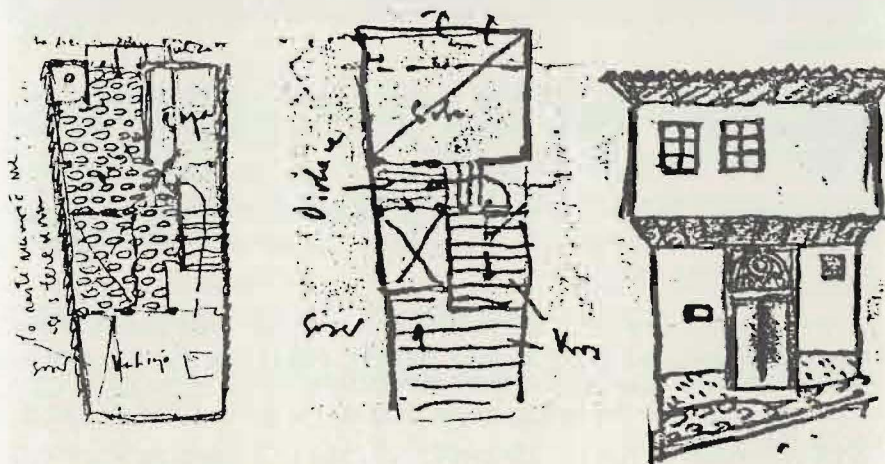


Second floor





Room with musandra — partition wall and sečija — built-in bench with cushions



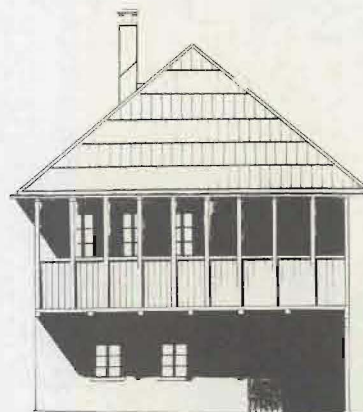
Hardina
ulica 117
Sve je to prišlo
u obliku patne
za najmanje
program!

»Room on the upper floor between the sky and earth«, one-room upper floor — Hardina Street 9

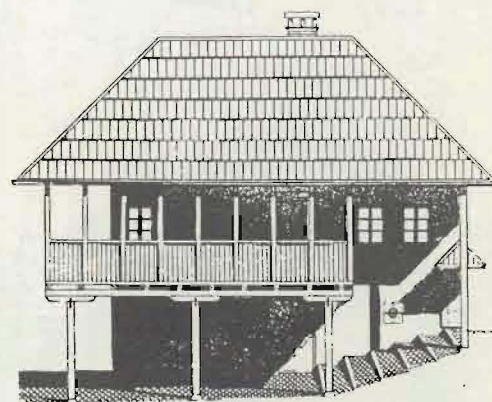
One-storied, pavilion one-family house with centric ground plan — Patke 12

Characteristics: Verandah

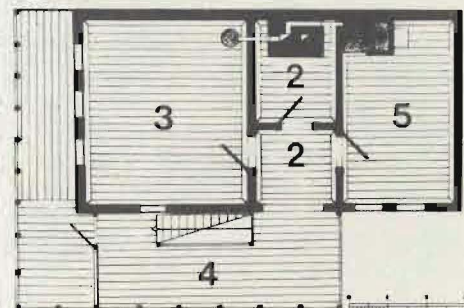
Side façade



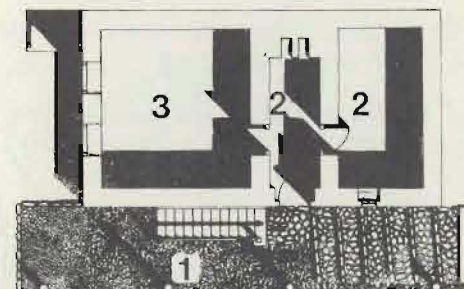
Façade



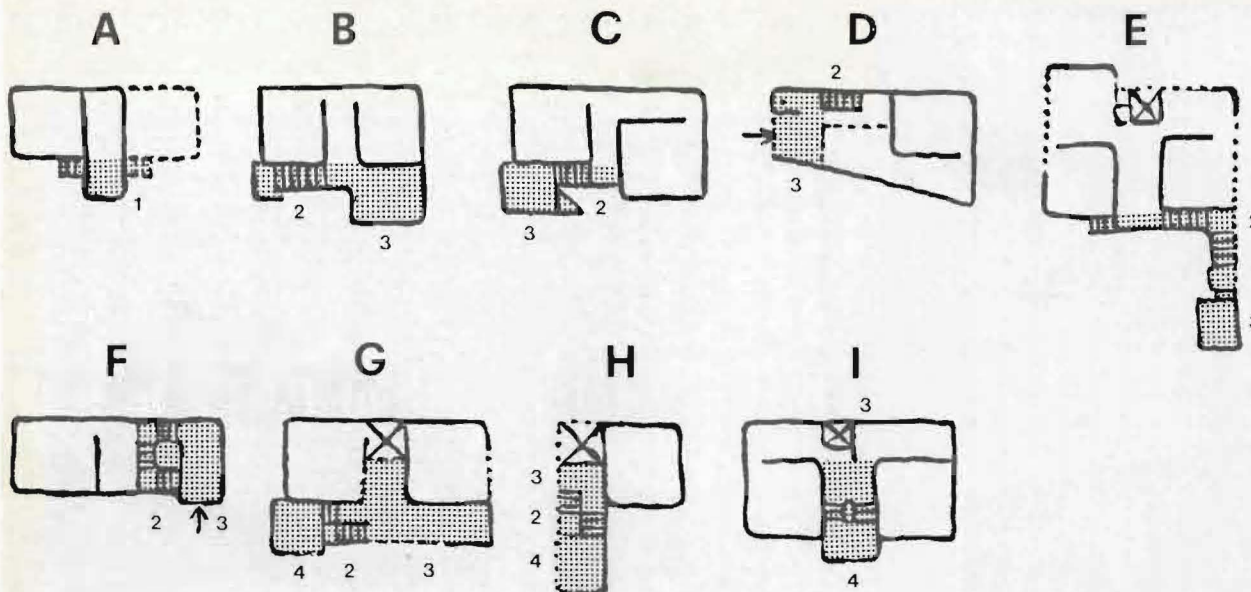
Second floor



First floor



- 1 porch with stairs
- 2 anteroom
- 3 room on the ground floor
- 4 verandah
- 5 kitchen



II. TYPICAL ARRANGEMENT OF ROOMS WITH VERANDAH

light — all the other rooms
dark:

- 1 papučluk — room for slippers
- 2 stairs
- 3 verandah
- 4 raised part of the verandah

2. Recreation

A characteristic feature of the oriental house is that it contains separate summer and winter living quarters. The development of these two quarters. The development of these two quarters is due to the continental climate with its severe winters and hot summers. The winter living quarters around the kitchen on the ground floor open into the hayat, while the summer living quarters on the first floor open into the divhana. Hence the hayat and the divhana have somewhat similar functions. Both result from climatic conditions and both represent a kind of vestibule from which the other rooms can be reached.

The divhana on the first floor rests on pillars. The open space under it is the so-called boshluk whence stairs lead to the first floor. The raised part of the divhana is called kameriya.

The divhana is not only an annex to the two-story house nor is it a sign of a high standard of living.

Its rudiments can be traced already in the one-story house of the embryonic ground plan. There are many stages in the development of the divhana.

A. In the beginning it had the function of the divhana, kameriya and papuchluk. The latter is a raised roofed wooden platform before the house accessible by a few steps; here slippers are kept.

B. C. Later when the paputchluk was separated from it the structure was raised higher over the sloping courtyard or garden, and was accessible by stairs from the papuchluk. This then was a combination of divhana and kameriya.

D. E. If there was too little free space, a porch, the so-called triem, developed over the entrance door or kapiya. This structure was reached by stairs leading past the hall or hayat.

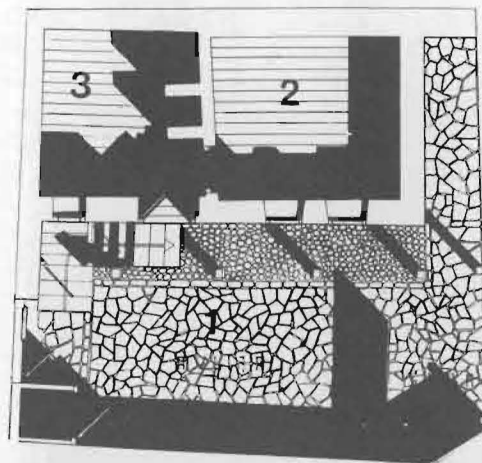
f. Sometimes a roofed courtyard, the so-called kapakli-avlija, developed in front of the house whence the divhana located over the courtyard, could be reached by stairs.

G. The divhana, however, reached its final stage of development in the two-story house with its separated summer and winter living quarters. Here the divhana was constructed either parallel to one or the other wall, or at right angles to the house, depending on the ground plan and location of the house.

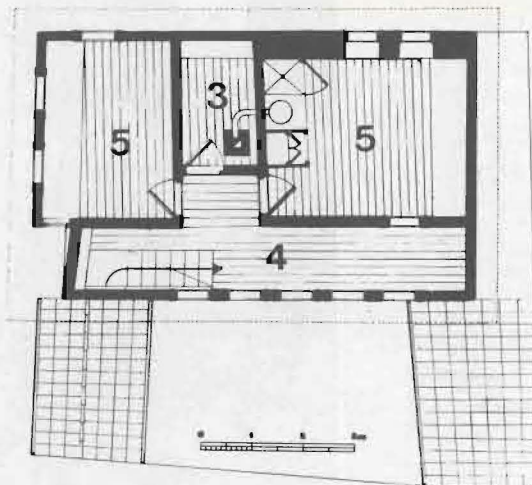
The stairs leading to it were placed in such a manner that they divided it into single spatial units all of which were simultaneously exposed to the view of the person ascending to the first floor. These stairs then are basically different from those found in West European buildings where they are an enclosed spatial unit.

**ONE-STORIED, PAVILION ONE-FAMILY HOUSE WITH CENTRIC GROUND
PLAN — LUGAVINA 66**

First floor



Second floor



- 1 courtyard
- 2 magaza — storehouse
- 3 kitchen
- 4 verandah with stairs
- 5 room on the upper floor

While the boshluk, the stairs and the divhana give only communication to the other rooms, the kameriya fitted with cushions and tahtaposh (a shelf for china and glass above the stairs), is reserved for recreation and leisure.

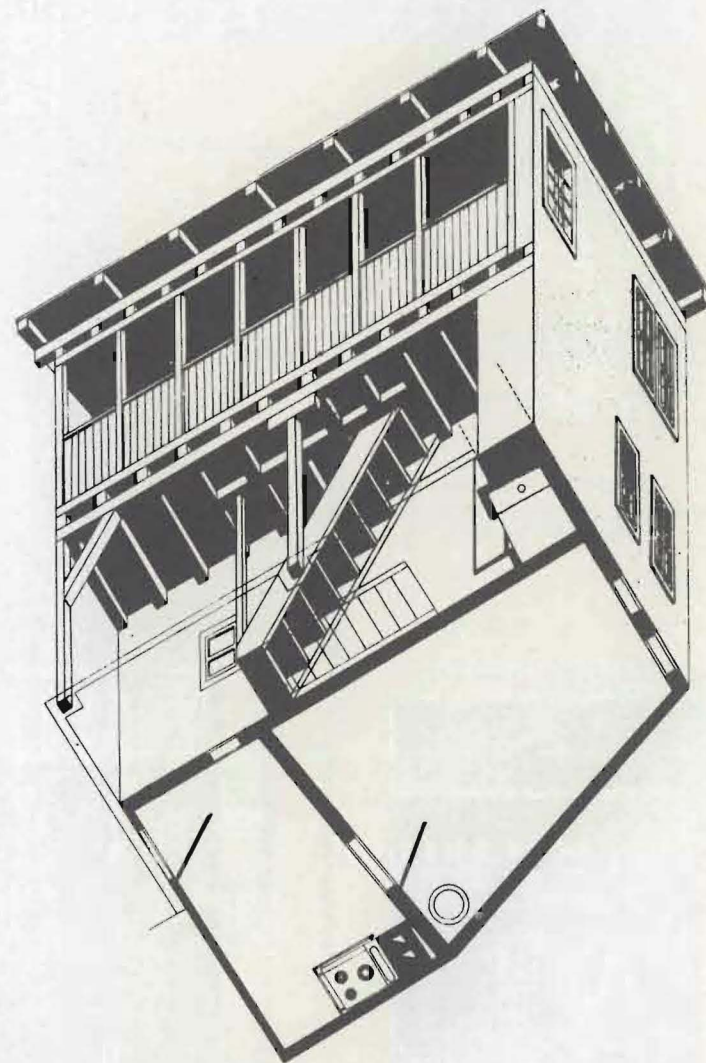
The kameriya fitted with cushions and containing latticed windows, is raised a little over the floor of the divhana. It usually commands a view of the courtyard, garden of town. In order to obtain a pleasant vista the Bosnian will construct corridors all around the house only to be able to place the kameriya at a vantage-point. This then is the garden kiosk rising above the ground and leaning against the house.

H. Sometimes such a kiosk or sofa is a separate one-story structure connected with the house by stairs leading to the divhana.

(3) Sometimes all three structures form a hall in front of the summer living quarters.

The development leads from the differentiation and formation of single spatial elements to the concentration of all these elements into one single spatial unit.

The divhana is an element unknown to the conventional West European house. Only recently attempts have been made to incorporate a similar



**Divhana of one-storied, as an annex-built two-family
(europeanized) house, with excentric ground plan — Bašcarsija**

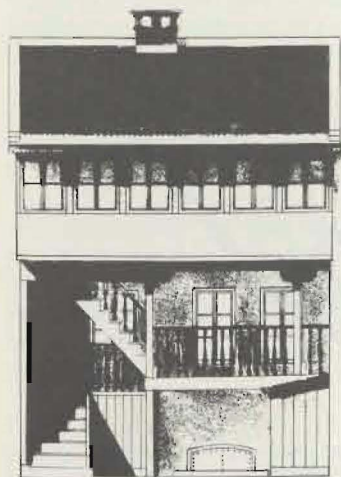
Shelf for china in the verandah



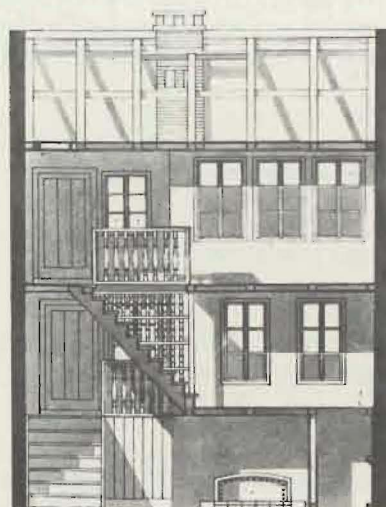
ONE-STORIED BUILT AS AN ANNEX TWO-FAMILY (EUROPEANIZED) HOUSE WITH EXCENTRIC GROUND PLAN — PATKE 16

Characteristics: verandah

Façade

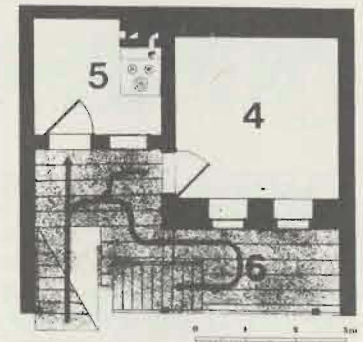


Cross section

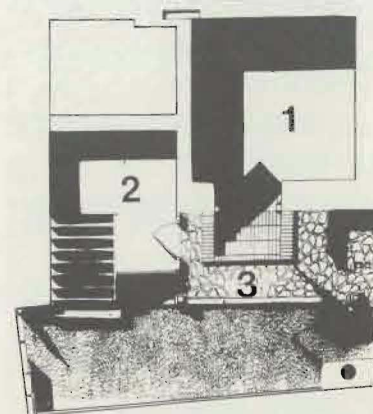


- 1 cellar, storeroom
- 2 shed
- 3 porch
- 4 room on the ground floor
- 5 kitchen
- 6 verandah

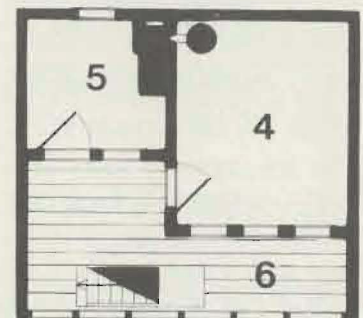
First floor



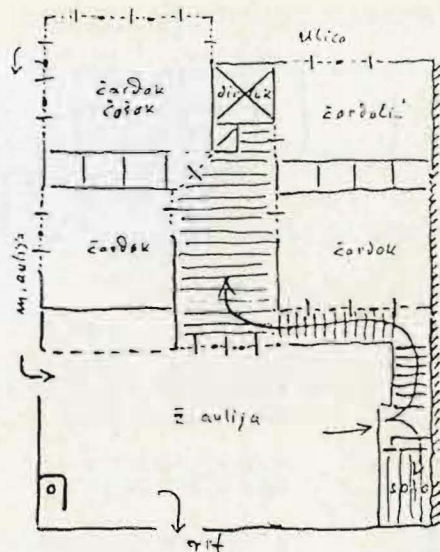
Underpinning



Upper floor

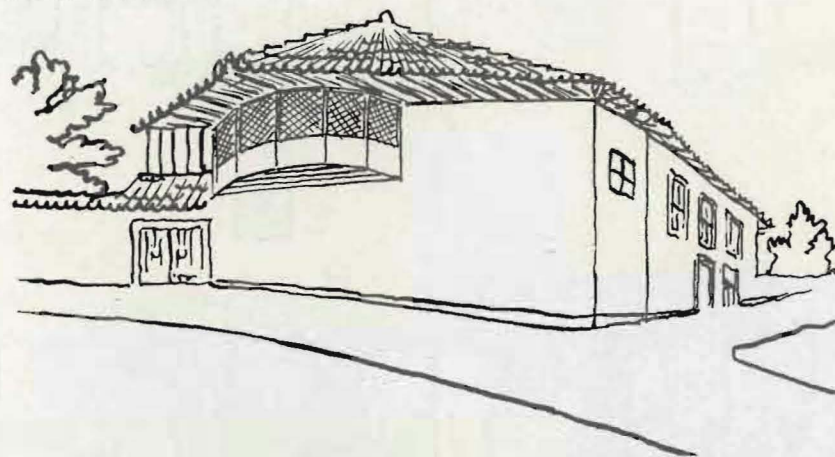


Typical arrangement of the rooms, with verandah in the middle



ONE-STORIED, PAVILION ONE-FAMILY HOUSE WITH EXCENTRIC GROUND PLAN — JEKOVAC 16

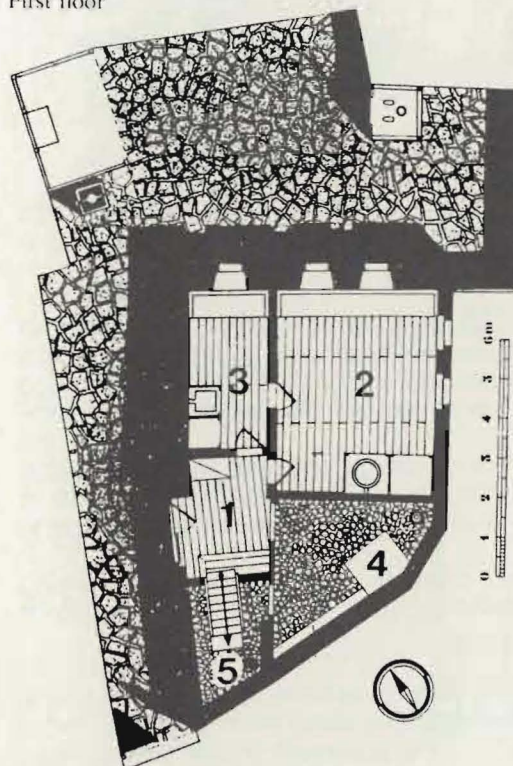
Characteristics: façade



structure in the modern house by constructing in it a two-storied living room.

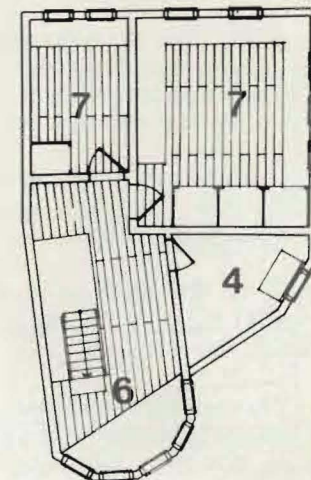
The view that the divhana is reserved only for women is erroneous because we shall see that it is also found in front of houses reserved for men only, and even in front of warehouses in the bashcharshiya where the merchants lounge and relax in company with their business acquaintances. By and large, the divhana is used by all members of the family who during the hot summer months avoid the other rooms and spend the days or even the nights in the airy divhana.

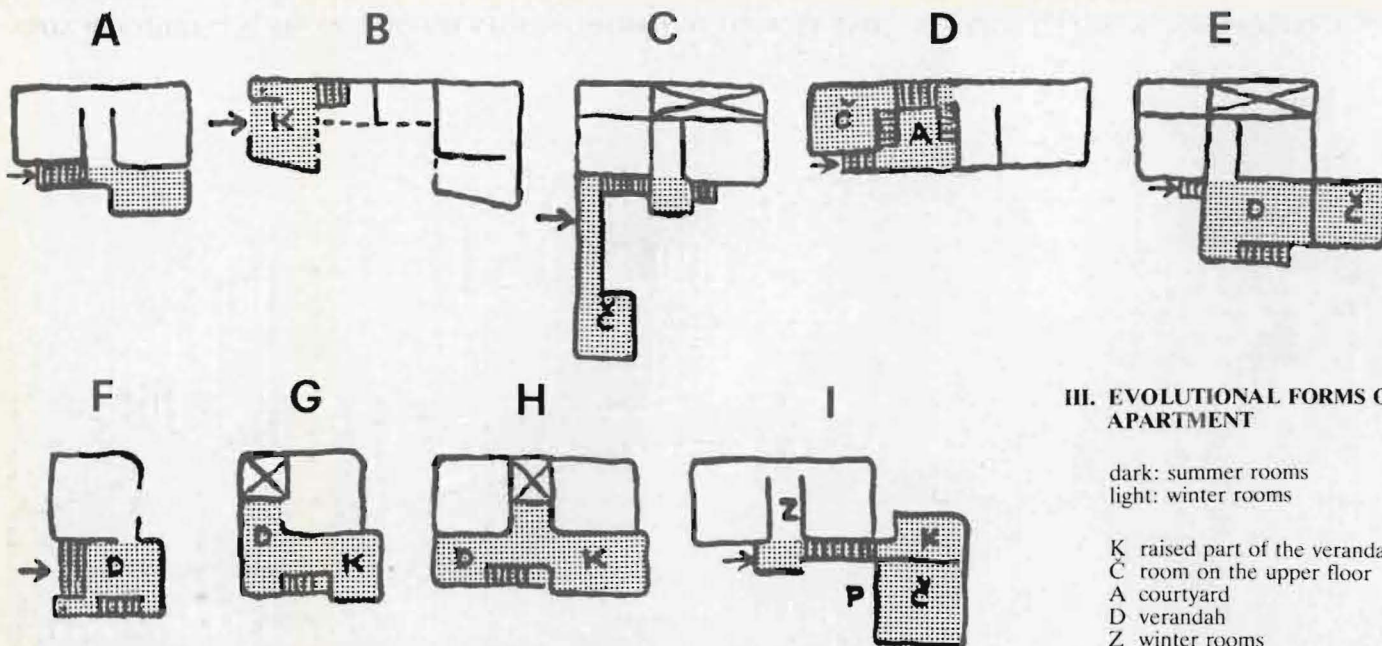
First floor



- 1 anteroom
- 2 room on the ground floor
- 3 janitor
- 4 kitchen
- 5 hudžera — storeroom
- 6 verandah with its raised part
- 7 room on the upper floor

Second floor





III. EVOLUTIONAL FORMS OF THE HOUSE — SUMMER AND WINTER APARTMENT

dark: summer rooms
light: winter rooms

K raised part of the verandah
C room on the upper floor
A courtyard
D verandah
Z winter rooms
P room for slippers

SUMMER AND WINTER HOUSES

Side by side with the molding of the divhana, the differentiation of the living quarters or houses into those used in summer and those used in winter was carried out.

A. B. C. This development begins with the papuchluk. Eventually the divhana is separated from the papuchluk and raised over the sloping site and the kapiya or triem. This structure is often plastered and provided with windows whereby the divhana becomes a chardak or summer room.

D. E. Between the living quarters on the ground floor and the chardak rising over the slope we often find a divhana or an anteroom with a divhana whence stairs lead to the chardak and the winter living quarters.

F. G. H. Still later attempts were made in two-story houses of varying ground plans, to develop summer living quarters on the ground floor behind the divhana.

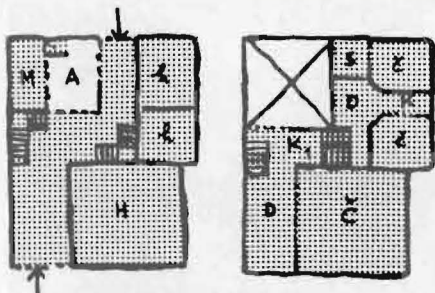
I. Eventually the summer quarters were transferred to the first floor of a separate two-story house and accessible by stairs leading past the winter living quarters. This house contained a storeroom on the ground floor.

The winter living quarters have a view of the street while the summer living quarters overlook the garden. The development reached its final stage with the construction of a separate summer house. People whose standard of living was high, moved during the summer months to their summer houses in the environs of the town.

IV. Such a house located amid orchards and meadows is usually two-storied. On the ground floor there is no winter kitchen but in the courtyard there are a summer kitchen, a privy and a fountain. The house itself contains a spacious halvat, a dining room, a living room, and rooms for the servants. On the first floor is a large chardak used as a drawing room and living room for the male inhabitants, and several small chardaks and sandukhanas which belong to the female living quarters. Each of these two living quarters has its own kameriya, divhana and staircase.

3. Utility Rooms

The basic difference between the European and oriental house lies in the separation of the living quarters from the utility rooms. All work connected with housekeeping is considered unclean and consequently done in the courtyard.



SUMMER HOUSE — WEEKEND COTTAGE

- kapija — gate (entrance)
 A courtyard
 M summer kitchen
 h small room
 H room on the ground floor
 IIII stairs
 E lavatory
 K₁ kahvodžak — hearth or making coffee
 D verandah
 K raised part of the verandah
 C room on the upper floor
 ċ small room
 s dressing room

dark — house
 light — courtyard

In order to keep the house as clean as possible it is divided into several compartments in which cleaning is done and which are suitably fitted for that purpose. The way into the house leads from the dirty street through the gate to the paved courtyard (area of wooden sandals) thence to the papuchluk (area of slippers) and finally into the carpet-laid rooms themselves. But even here cleaning is not brought to a close, for every oriental room is fitted with a wash basin.

In winter the Orientals withdraw to their massive winter living quarters around the winter kitchen on the ground floor. In summer, however, they live in their airy summer quarters on the first floor and do all the work in the courtyard.

The principal enemies the Oriental has to contend with in the courtyard, are dirt, dampness, bad air, and smoke. In order to cope with them effectually the following three structural units were devised.

1. The communication unit consisting of the kapiya and the ashikpendjer (a window at which girls flirt with boys).

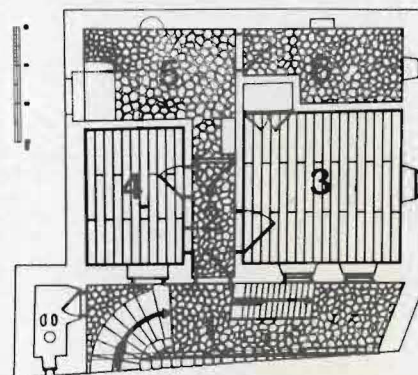
2. The sanitary unit comprising a fountain and a privy. We can distinguish two sanitary systems — the inner around the lavatory and the outer around the fountain.

3. The kitchen unit consisting of the summer kitchen, woodshed, and a kettle for washing linen.

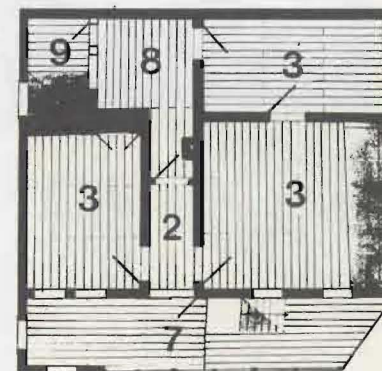
ONE-STORIED BUILT-IN ONE-FAMILY CENTRIC HOUSE WITHOUT COURTYARD

- 1 entrance, porch
 2 anteroom
 3 room on the ground floor
 4 storehouse
 5 kitchen
 6 storeroom
 7 verandah
 8 drying-room
 9 dolaf — built-in wardrobe

First floor

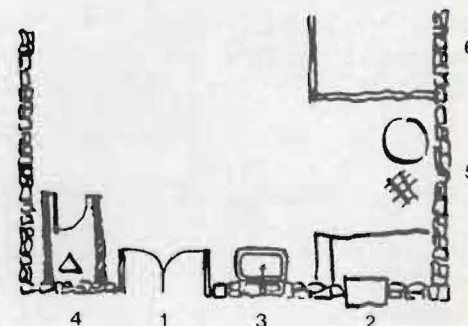


Second floor



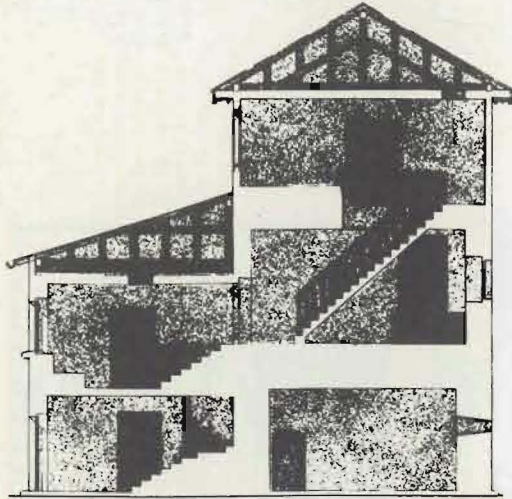
EXTERIOR UNIT IN COURTYARD

- 1 gate (entrance)
 2 ašik pendžer — flirt-window
 3 fountain
 4 lavatory
 5 summer kitchen
 6 odumluk — wood shed and laundry kettle



**TWO-STORIED, PAVILION ONE-FAMILY
RECONSTRUCTED WINTER AND SUMMER HOUSE
WITH CENTRIC GROUND PLAN (BEHIND THE
UNIVERSITY LIBRARY)**

Characteristics: Kiosk house, staircase



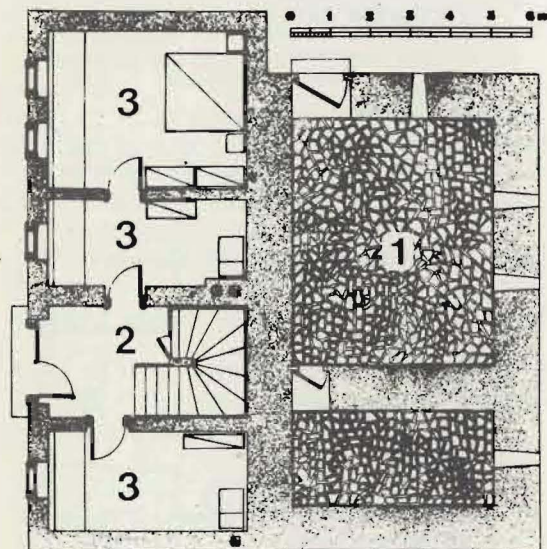
Cross section

- 1 storeroom
- 2 anteroom with stairs
- 3 room
- 4 verandah

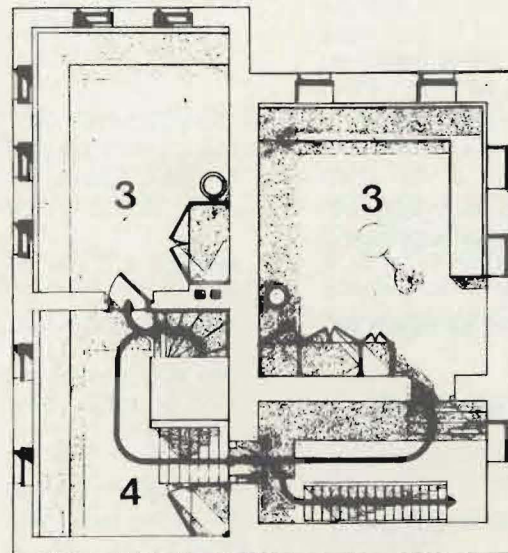
View of a building



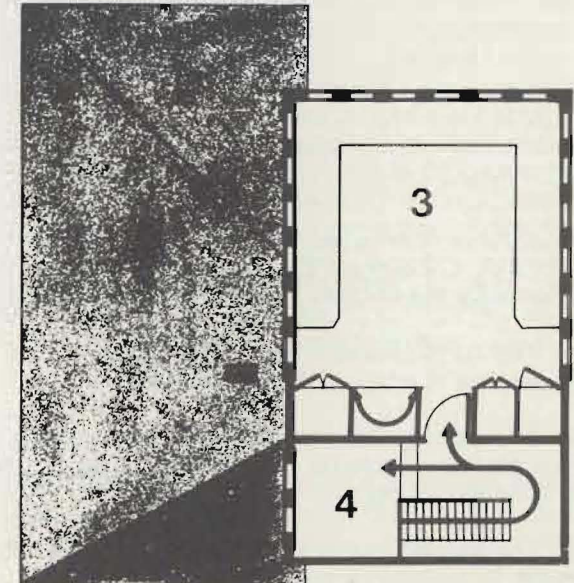
First floor

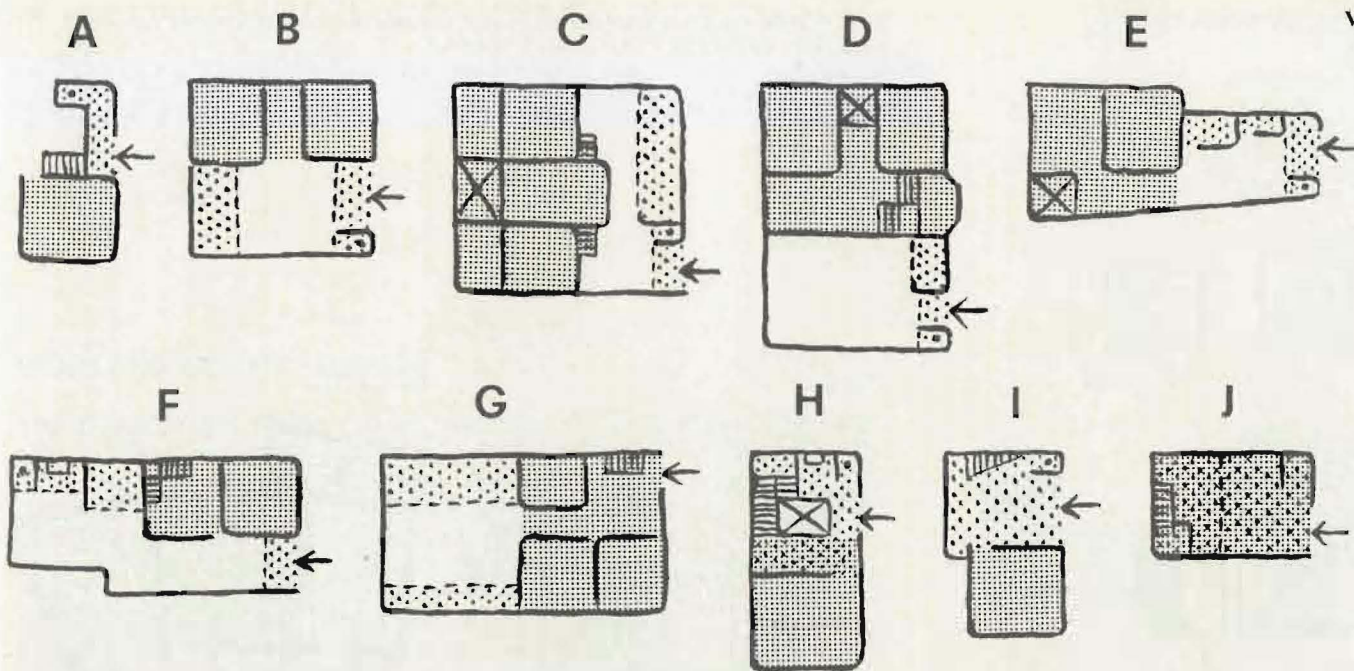


Second Floor



Third floor





V. HOUSEHOLD UTILITIES IN COURTYARD

dark: house and stairs
light: courtyard
dotted: communication, sanitary
and kitchen spaces
← entrance
⌞ lavatory

All these structures which are placed under the porch lean usually against the courtyard wall. How far the development can go depends on the standard of living of the tenants and the size of the site.

A. In the beginning there will, perhaps, be only a kapiya and a privy placed against the courtyard wall running parallel to the street.

B. Eventually the kapiya and privy will be developed at the near end, and the summer kitchen at the far end, of the courtyard.

C. D. Later the communication, sanitary, and kitchen units will be placed along the courtyard wall running parallel to the street.

E. Still later the communication and sanitary units will be placed in front, and the kitchen unit at one side, of the house.

F. Or the communication unit in front, and the sanitary and kitchen unit at the rear.

G. Further the sanitary unit will be found at one side, and the kitchen unit at the other side of the courtyard.

H. Then again the communication unit with stairs as well as the sanitary and kitchen unit at all three walls of the courtyard around a small hypaethron.

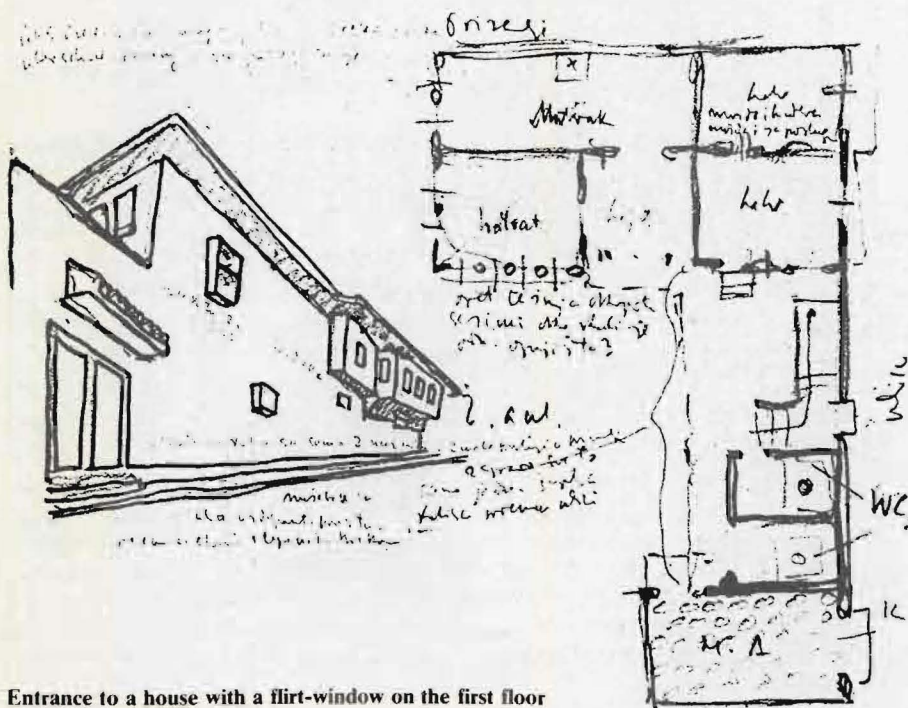
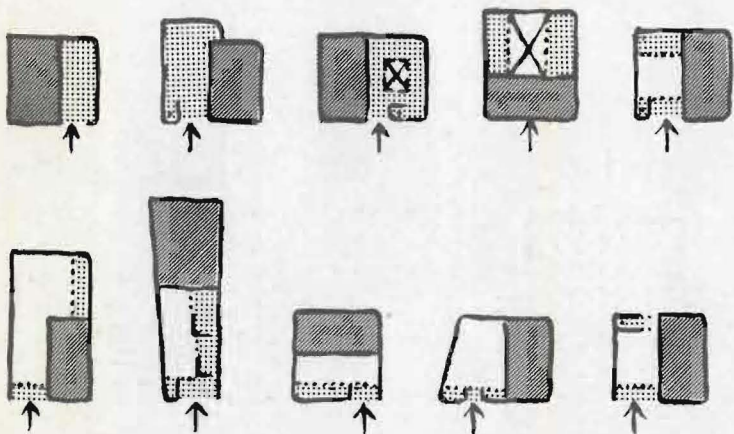
I. All units in the boshluk under the divhana.

J. All units together with the stairs in the roofed kapakli avliya under the living quarters on the first floor.

The arrangement of the units placed side by side is very practical: the privy isolated in one corner (smell), the fountain close by (washing), the summer kitchen and woodshed (isolated). Sometimes the fountain is placed between the privy and the kitchen.

The courtyards, especially those owned by people with a low standard of living, are most practically utilized. Since the structures in the courtyard are of different sizes and shapes, the wall in front of them meanders, and since the house does the same it is often difficult to say where the house ends and the courtyard begins. Or in other words, the oriental house differs from the European in that it evolves into the outer space.

in dashes dark: houses
dotted: sanitary and household space
light: courtyard
☐ lavatory
← entrances



- 1 entrance
- 2 courtyard with porch
- 3 kitchen
- 4 storeroom
- 5 room
- 6 lavatory
- 7 laundry
- 8 verandah

VII. EVOLUTION OF THE FORMS OF THE MEN'S AND WOMEN'S HOUSE

dark: houses and utility spaces
light: courtyard
M — men's courtyard
Z — women's courtyard
III staircase
← entrance
□ lavatory

MEN'S AND WOMEN'S HOUSES

The development of the communications in the oriental house was greatly influenced by the division of the house into the living quarters for men and those for women. Apart from the division into winter and summer houses that into men's and women's houses was also carried out. The two part of the house thus divided are known in Europe as the selamluk and the harem. We Europeans are prone to regard the harem, as a hotbed of carnal pleasures, whereas in reality it is nothing but that part of the house which is occupied by the family. The remaining part of the house is reserved for business activities. This division is akin to that encountered in Roman houses which like the oriental, are of Persian origin.

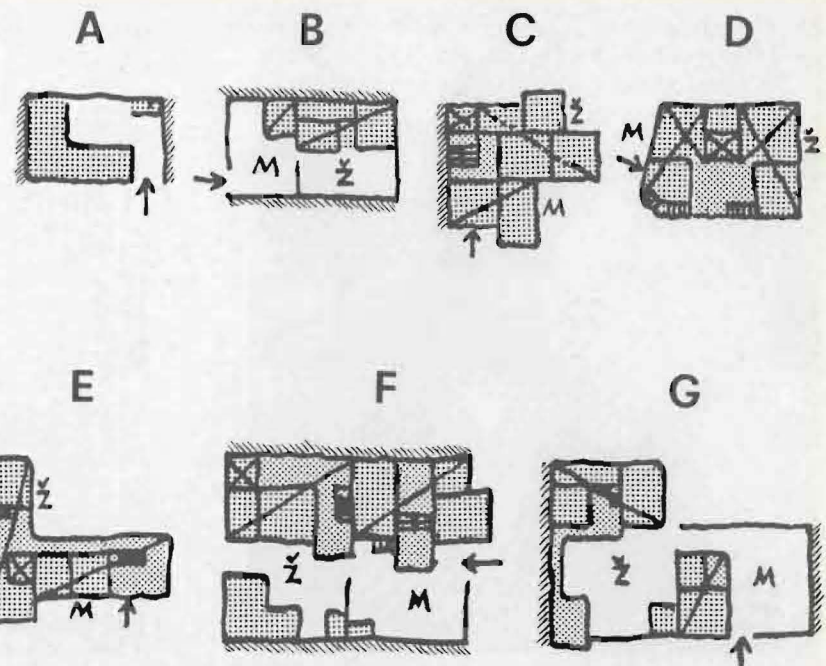
Although only very few instances of complete division are found in Sarajevo, houses in which division was only partly carried out are numerous and all the more interesting.

A. Differentiation begins in the courtyard with a L shaped house which visitors can enter without catching sight of the family living quarters.

B. The next stage is reached when the courtyard is divided by a wall into two parts, one for men and one for women. In the women's courtyard is a complete dwelling house with all the usual conveniences while in the men's courtyard located before the women's is a one-room structure for the janitor (momak). The latter structure represents the first attempt at building a separate house for men.

C. Differentiation of the interior begins only after the differentiation of the courtyard was accomplished. Such a house has usually on the ground floor in the men's courtyard a janitor's room with a common staircase and a divhana beside several separate living quarters on the first floor.

D. Eventually two separate staircases are constructed, one accessible from the men's and the other from the women's courtyard. Both lead to the common divhana and the men's as well as women's living quarters on the first floor.



E. Later the undifferentiated divhana becomes L shaped so that the women's living quarters are hidden from those for men.

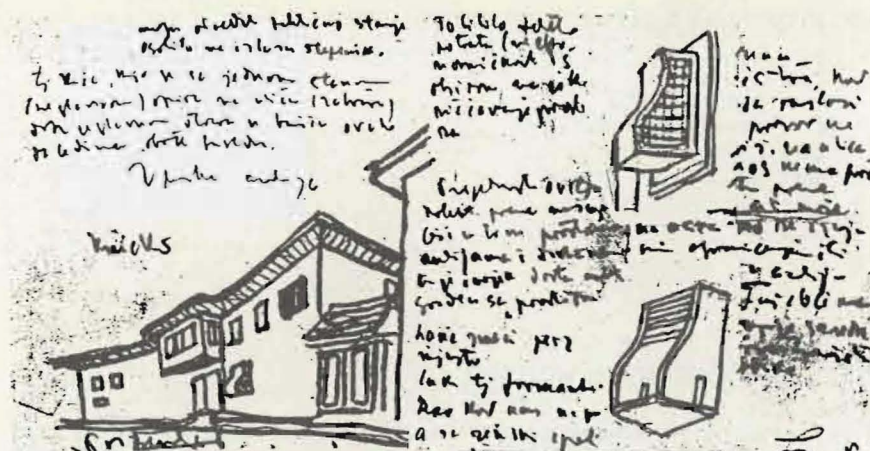
F. With the differentiation of the divhana into one for men and the other for women, a complete separation of the men's living quarters from those for women was carried out. Although both living quarters are under the same roof one is placed in the women's and the other in the men's courtyard, each has its own staircase and own divhana. The two living quarters, however, are connected by a door in the men's chardak.

G. Still later the women's house is completely separated from that for men, and each placed in its own courtyard.

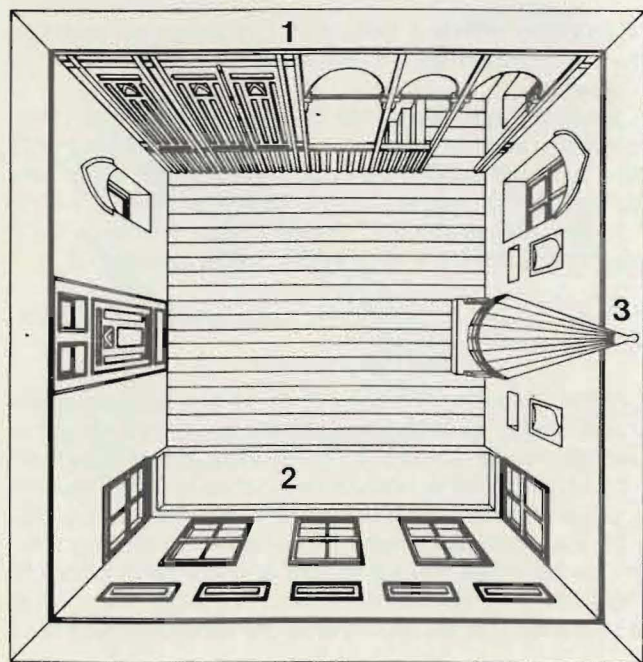
IV. In the final stage of the development each of these two houses is differentiated into a summer and a winter house with the result that we get a one-storied men's winter house beside a two-storied men's summer house in the men's courtyard, and a one-storied women's winter house beside a two storied women's summer house in the women's courtyard. On the ground floor of the summer houses are placed the storerooms. Both summer houses can be under the same roof and can be connected by a corridor leading from the women's divhana through the men's chardak to the men's divhana. The two courtyards are likewise connected by a gate or kapiya.



Wiew from mušebak — a wooden lattice window



Ašik pendžer — flirt-window on the first floor in Kulina bana Street 1

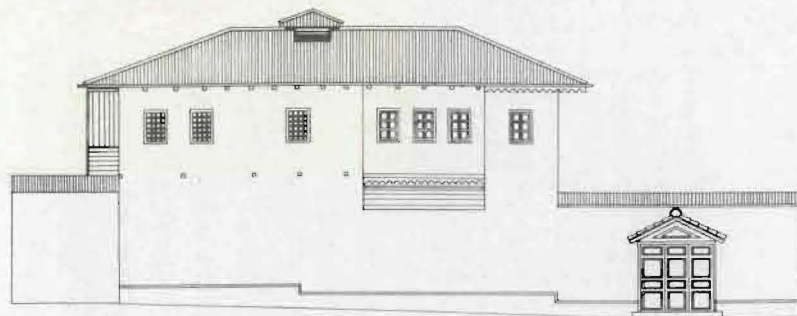


The ground plans of the houses referred to above, differ from the basic ground plans in that two interdependent ground plans developed from one. Consequently, we shall miss in one ground plan those rooms which were more fully developed in the other ground plan.

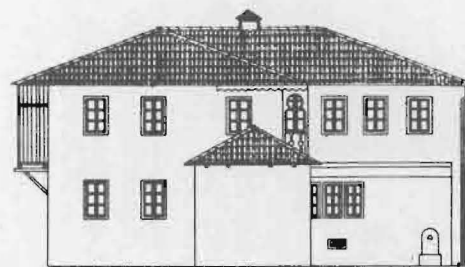
Thus, for example, will the halvat or chardak develop in the men's house and be used as a drawing room for the whole house, while the winter kitchen of the men's house will be transformed either into the so-called kahvodjak »coffee kitchen« or into the janitor's room.

On the other hand, however, the kitchen of the women's house will remain unaltered. In the latter house a girl's room will usually be found separated from the living quarters around the divhana on the first floor and overlooking the street through the so-called ashikpendjer, a window at which girls flirt with their beaux.

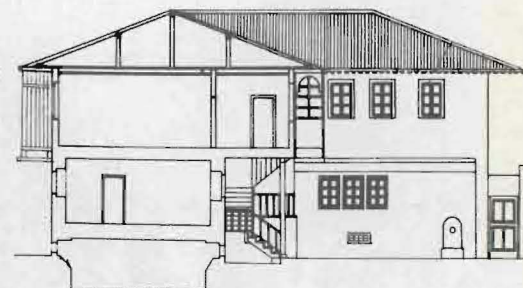
Front façade



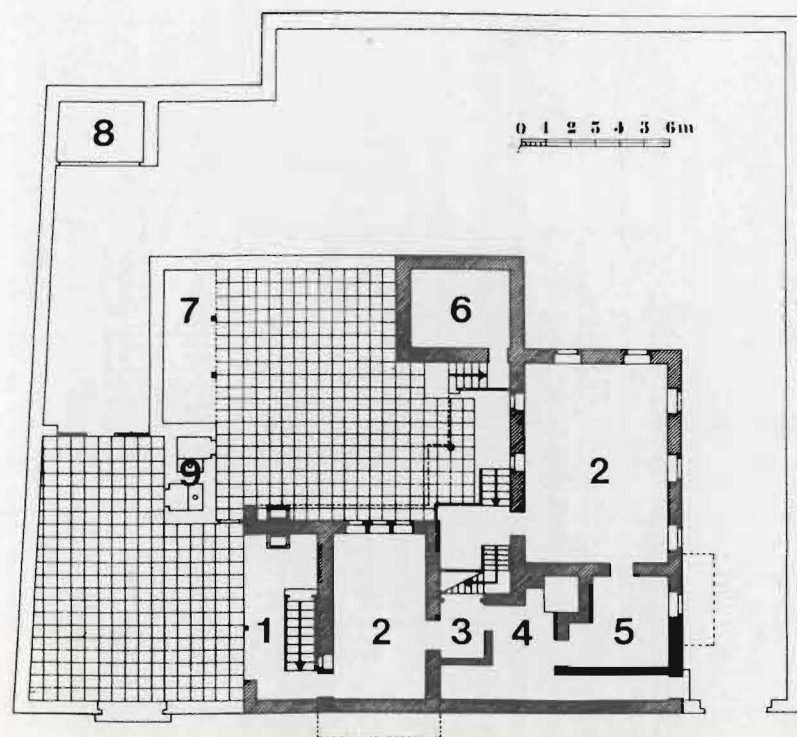
Side façade



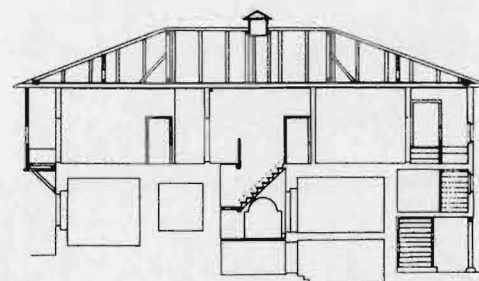
Cross section



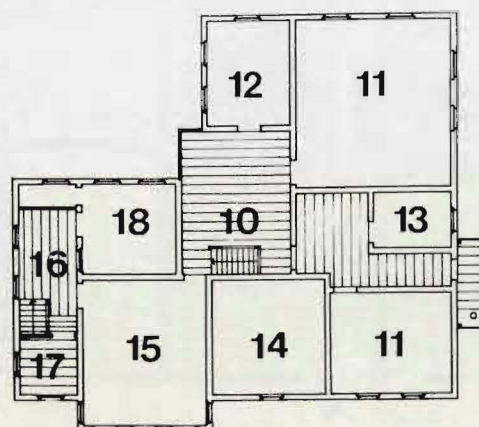
First floor



Cross section



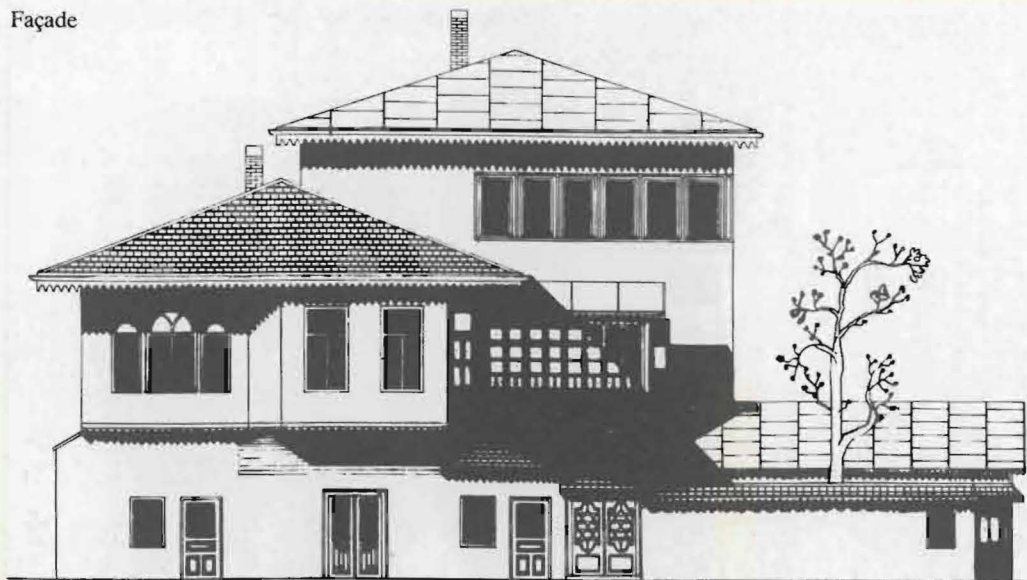
Second floor



**ONE-STORIED, PAVILION
ONE-FAMILY MEN'S AND WOMEN'S
HOUSE — POTOKLI STREET 1**

- 1 room below the verandah
- 2 room on the ground floor
- 3 anteroom
- 4 kitchen
- 5 storeroom
- 6 storehouse
- 7 summer kitchen
- 8 tool shed
- 9 lavatory
- 10 verandah
- 11 women's room on the upper floor
- 12 women's small room
- 13 dressing room
- 14 chimney
- 15 men's room on the upper floor
- 16 men's verandah
- 17 men's raised part of the verandah
- 18 room on the upper floor — hearth for making coffee

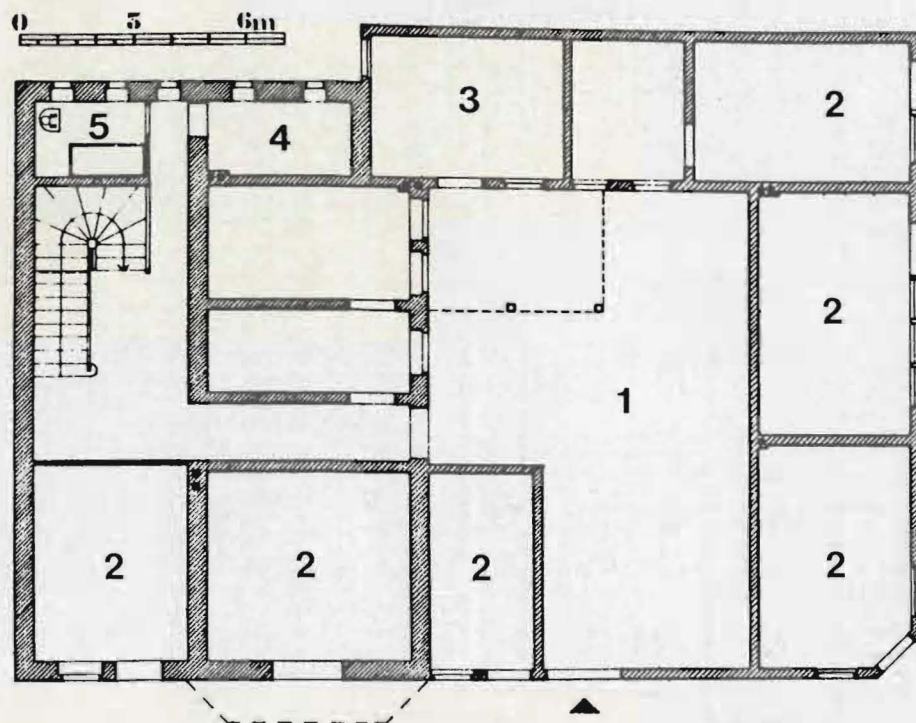
Façade



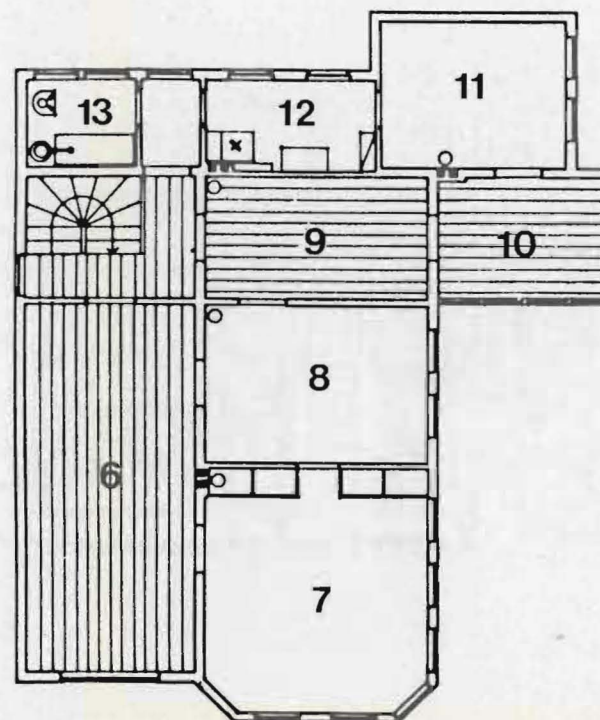
**ONE-STORIED BUILT AS ANNEX ONE-FAMILY HOUSE WITH
QUARTERS FOR MEN AND WOMEN (BEHIND THE UNIVERSITY
LIBRARY)**

- 1 courtyard
- 2 stores, workshops
- 3 tool shed
- 4 woodshed
- 5 lavatory in the bath
- 6 men's verandah
- 7 men's room on the upper floor
- 8 men's small room
- 9 women's verandah
- 10 women's raised part of the verandah
- 11 women's room on the upper floor
- 12 kitchen
- 13 bath with lavatory

First floor

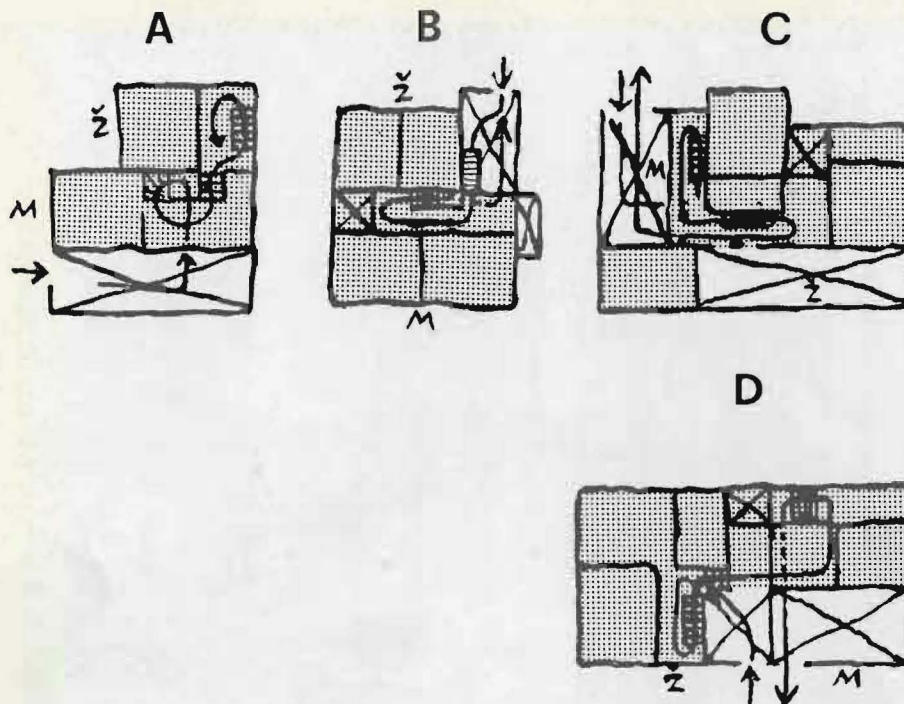


Second floor





Babić's house



VIII. EVOLUTION OF INTERIOR CIRCULATION

dark: house
light: courtyard
M — men's courtyard
Z — women's courtyard

← circulation direction in the courtyard
in the house

4a. Interior Circulation

The attempt to hide the inner private rooms from curious eyes led to some peculiar forms of circulation. Here we must distinguish between the circulation in the house itself and that between the gardens and the courtyards.

Interior circulation depends on whether the house is one- or two-storied, and whether the two-storied house is divided into a women's and a men's house.

The more the house is differentiated, the more intricate will be the circulation. It will be, therefore, necessary to determine the degree to which differentiation was carried out, i. e. whether the house has one or two living quarters, one or two divhanas, one or two staircases, one or two courtyards, and whether the men's and women's quarters are under the same or under a separate roof.

Interior circulation either isolates one part of the house from the other, or it connects them in such a manner that all rooms can be passed in one run. Thus three different kinds of circulation developed.

A. The rooms are placed between two entrance doors so that they can be entered through one door, passed in one run and left through the other door without the necessity of going back.

B. C. The rooms can be entered through a door, passed in one run and left through the same door.

D. The rooms can be entered through a door, passed and left along the same way through the same door.

The degree of privacy of the inner rooms will vary and depend on the degree of differentiation.

Temporary privacy can be obtained by shutting off some rooms while the others are in use.

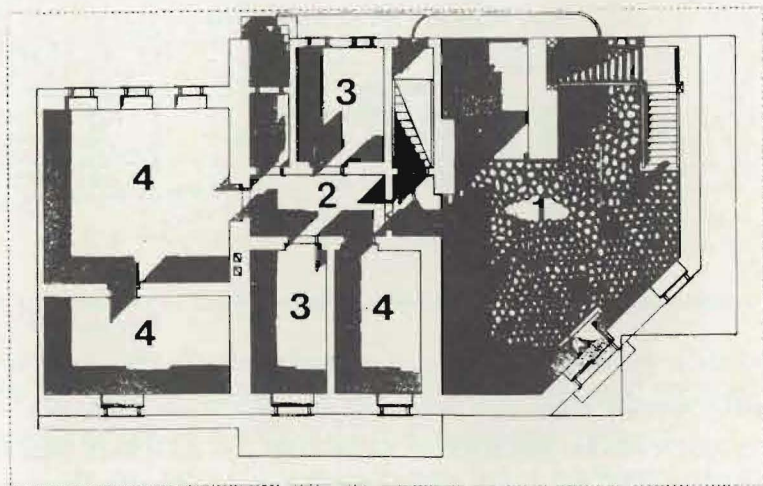
Privacy likewise can be obtained by a L shaped divhana.

Complete privacy can be ensured by the differentiation of the house into separate men's and women's living quarters, in which case the two quarters are in communication only through the men's chardak. When sepa-

rate houses exist for men and women then the common circulation is out-of-doors, or the interior circulation is the same as described under D.

The chief feature of the way through the rooms is that it does not follow a straight line but is very devious. Both the chardak and the halvat are placed behind the entrance door in one corner of the musandra and even the kitchen is placed behind the corner. Originally such an arrangement was prompted by the desire to obtain privacy, later, however, it became an architectural principle springing from the desire to string the rooms along the way to the house in such a manner that a person traversing one room would unexpectedly discover another and yet another. The finest example of this procedure is the divhana divided by the staircase into single spatial units all of which can be viewed and traversed before entering the room.

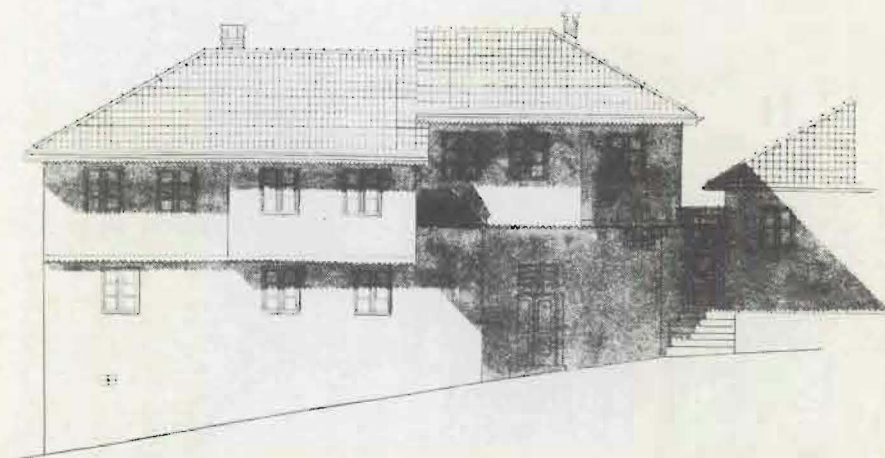
First floor



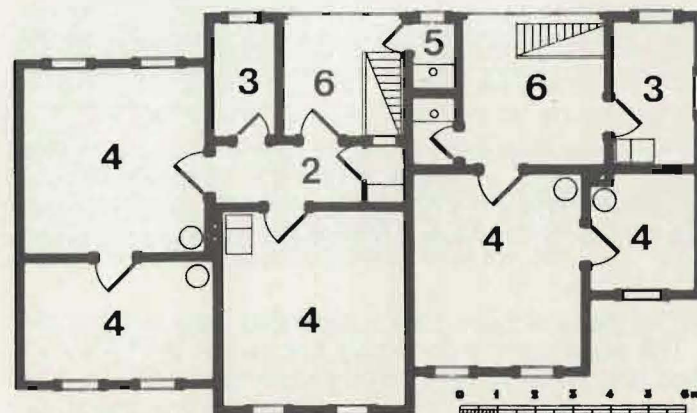
ONE-STORIED, PAVILION (EUROPEANIZED) TWO-FAMILY MEN'S AND WOMEN'S HOUSE — KREŠELJAKOVIĆA 9

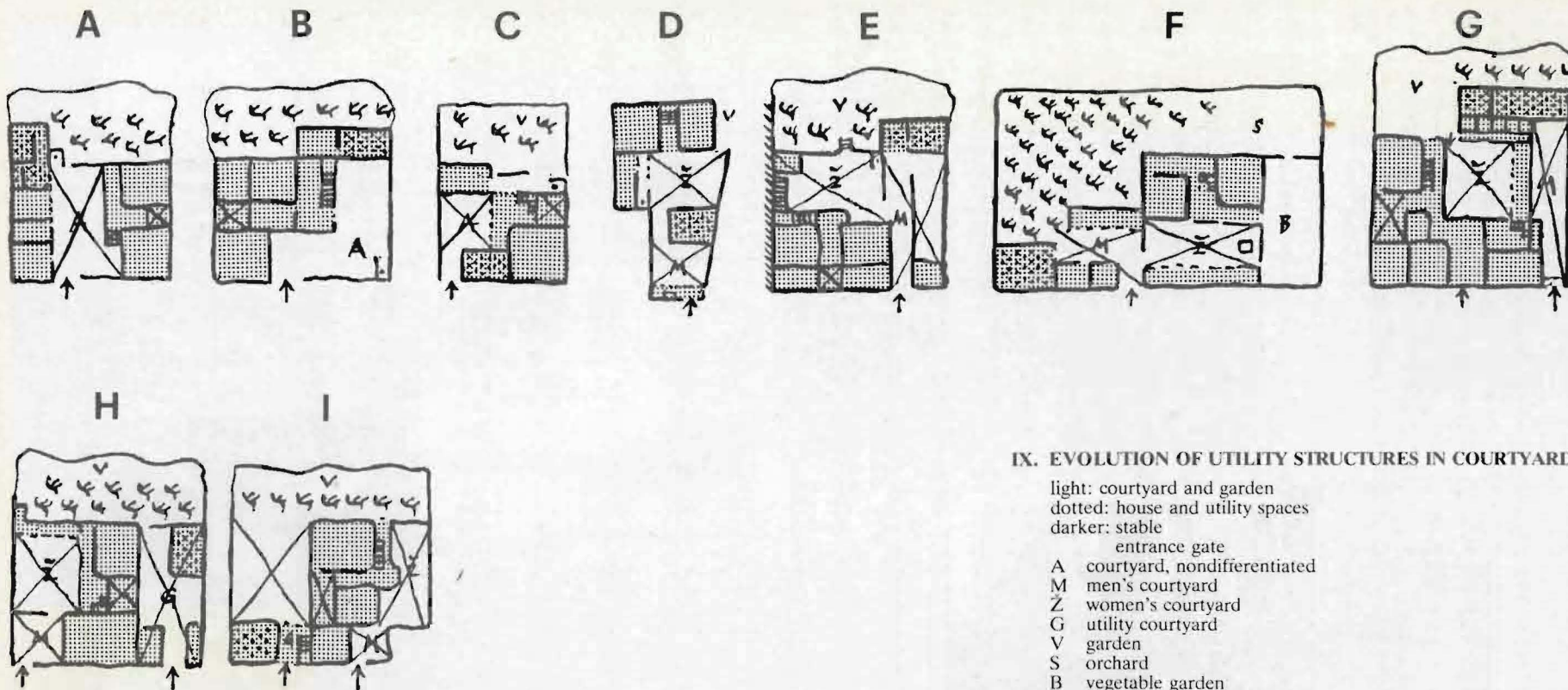
- 1 courtyard
- 2 anteroom
- 3 kitchen
- 4 room
- 5 lavatory
- 6 verandah

Façade



Second floor





THE FARM BUILDING

In order to understand the outer circulation we must make an inquiry into the differentiation of the men's part of a landowner's town house. There is something rural in this house although it is not a true farmhouse, for the farm buildings are only as many and as large as required by everyday needs.

The houses of townsmen discussed in the foregoing chapters, evolved from the courtyard. Because of the livestock the farmhouse cannot dispense with a garden. There are usually a vegetable garden and an orchard. In the latter a kiosk or bower is placed which serves for leisure and recreation.

The chief features of the farmhouse are the separated living quarters and farm premises. This separation is necessary because in the farm area dirty work is done and because here visitors dismount and leave their horses before entering the house. The farm premises are, therefore,

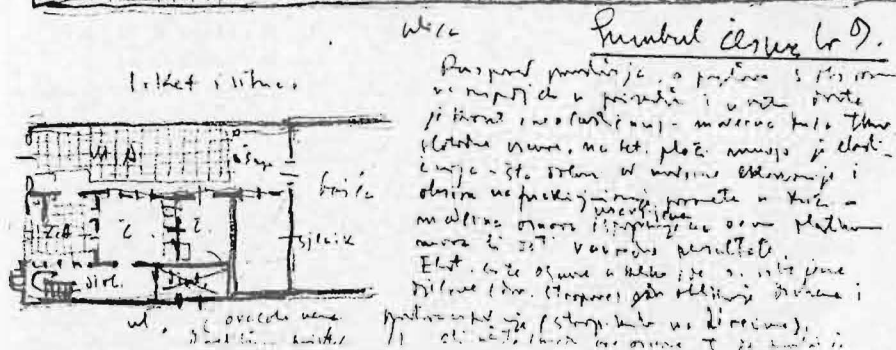
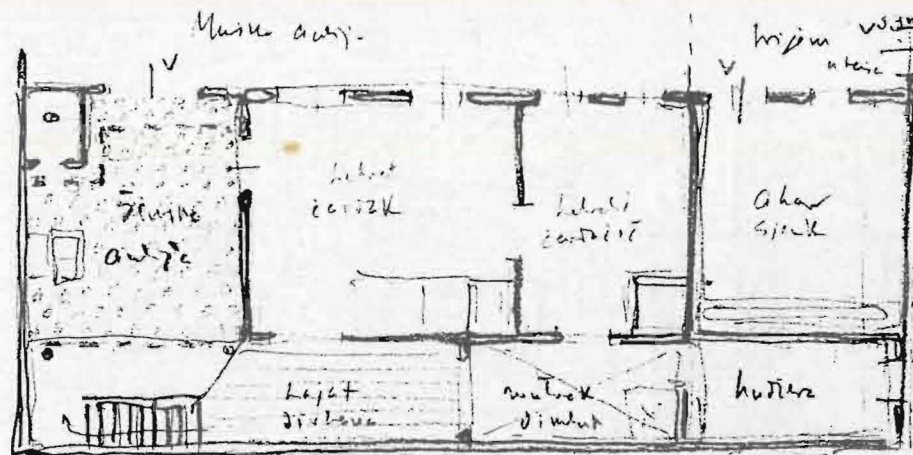
placed either in the men's courtyard accessible directly from the street, or in a separate farm yard which likewise can be entered from the street.

As the rooms around the summer kitchen are a characteristic feature of the women's courtyard so the stables are typical for the farm yard.

The farm buildings are: the stable with a dung pit near the garden, the hayloft over the stable, a wagon shed close to the stable, a poultry house, a booth for the janitor, and, sometimes, several silos (hambar) and even a bakery.

Rarely, however, are all houses provided with all these buildings. The size and layout of the houses also varies depending on whether they are owned by semi-farmers or beys.

A. In the beginning the stable, the woodshed and the other domestic offices were placed under the same triem in the undifferentiated courtyard.



Stable and samamluk — hay-loft, detached under the same roof in the men's courtyard — Sumbul fountain no.9

B. C. Eventually the stable was separated from the domestic offices and placed either in front or rear of the undifferentiated courtyard.

B. C. Eventually the stable was separated from the domestic offices and placed either in front or rear of the undifferentiated courtyard.

D. When it was placed between the men's and women's courtyard then it prevented livestock from entering the house, and separated the clean from the unclean area.

E. F. G. Sometimes it was placed in the men's courtyard close to the janitor's booth.

H. I. Finally all farm buildings were placed in a separate farm yard accessible on one side directly from the street and on the other through either the hayat or the winter kitchen on the ground floor.

Side by side with the development of the courtyard went the differentiation of the garden:

A. B. C. In the beginning an undifferentiated garden beside the equal courtyard with the stable.

D. Later a separate women's courtyard with domestic offices and a separate men's courtyard with a stable and a undifferentiated garden.

E. A men's courtyard with farm buildings and a women's courtyard with domestic offices beside an undifferentiated garden.

F. Both courtyards as under E and an orchard and vegetable garden.

G. A men's, women's, and farm courtyard with all farm buildings, and an orchard and vegetable garden behind either the farm or men's courtyard.

Parallel to this development was the differentiation of houses:

A. B. A one-storied undifferentiated house or a two-storied house with separate winter and summer living quarters, either of them placed in an undifferentiated courtyard beside an undifferentiated garden.

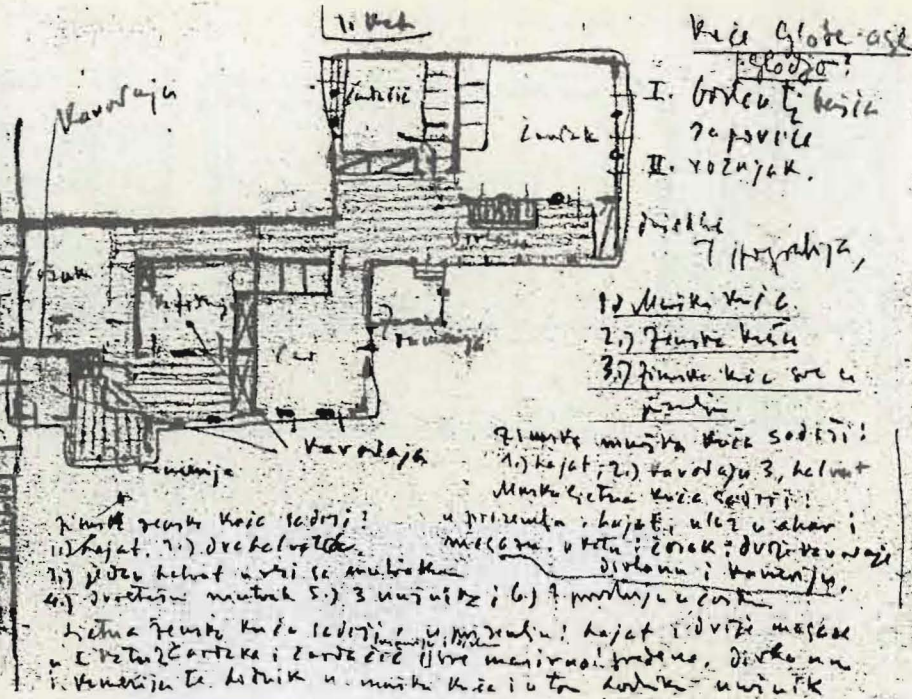
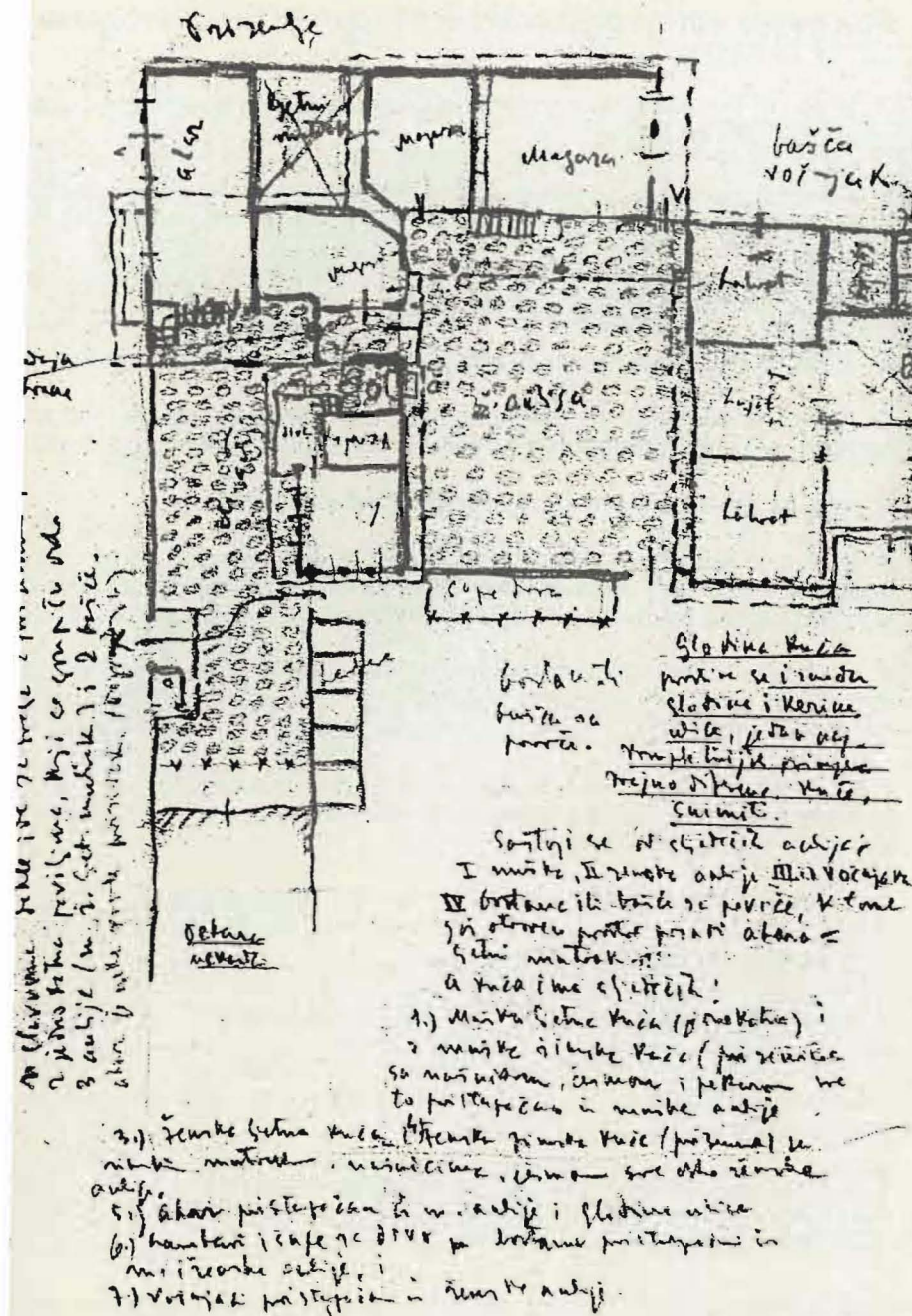
F. G. A two-storied differentiated house in the women's courtyard beside the men's courtyard with farm buildings and beside an undifferentiated garden or a vegetable garden and separate orchard.

H. I. A two-storied house with separate living quarters for men and women, and a men's and a women's yard on one side and a farmyard on the other plus an undifferentiated garden.

X. A men's courtyard with a men's one-storied house and farm buildings, a women's courtyard with a one-storied differentiated women's house, and a garden behind both houses.

XIII. A one-storied men's winter house beside a two-storied men's summer house and farm buildings in the men's courtyard, and a women's one-storied winter house beside a two-storied women's summer house in the women's courtyard — all surrounded by an orchard and a vegetable garden.

The degree of development can be determined in the area of the gate, courtyard, house, and garden. It, of course, depends on the living standard of the tenant, and the size of the site.



SVRCIN'S HOUSE — Glodina Street 4 (sketch and legend from author's sketchbook)

Svrcin's house between Glodina and Kerim Streets is one of the most complete instances of double differentiated house. It consists of the following courtyards: I. men's, II. women's, III. orchard, IV. vegetable garden, and an open space behind the table with the summer kitchen.

The houses are:

- (1) Men's summer house (one-storied)
- (2) Men's winter house (single-story) with lavatory, fountain and bakery. All is accessible from men's courtyard.
- (3) Women's summer house
- (4) Women's winter house (single-story) with the winter kitchen, lavatories, fountain. Everything around women's courtyard.
- (5) Stable is accessible from men's courtyard and Glodina Street.
- (6) Hay-lofts, woodsheds and vegetable garden, accessible from men's and women's courtyards.
- (7) Orchard, accessible from women's courtyard.

- (1) Men's house
- (2) Women's house
- (3) Winter houses have everything on ground floor

Winter house includes:

- 1 anteroom
- 2 kavodaja — coffee-room
- 3 room on ground floor

Summer men's house includes:

on ground floor: anteroom, entrance to stable and storeroom
on upper floor: čošak — room with windows overhanging the street, two coffee-rooms, verandah and its raised part.

Winter women's house includes:

- (1) anteroom
- (2) two rooms on the upper floor
- (3) one room with kitchen
- (4) two-storied kitchen
- (5) three lavatories
- (6) corner space

Women's summer house includes:

on ground floor: anteroom and two storehouses
on upper floor: two rooms, a small room, verandah and its raised part.

Massive construction — verandah and its raised part and passage to men's house with lavatory.

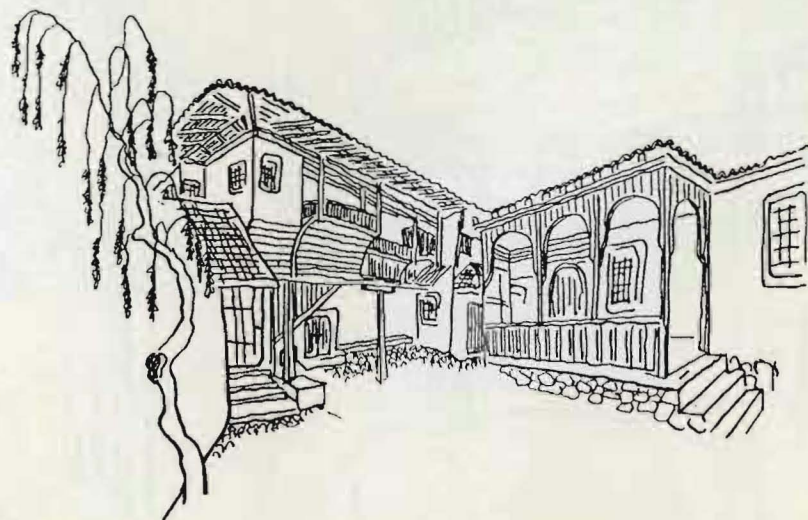
The individual pavilions are interconnected in an interesting manner, courtyards are closed always that way.

Curiously, kitchen is a component part of women's house, and coffee-room so of the men's house. Interesting is the interconnection of men's and women's houses on upper floor, for the second time through men's house's room (corner), an on ground floor through the door of the men's and women's courtyards.

Thus, there are mainly two ground floor and two upper floor pavilions, grouped around three courtyards (men's, women's and summer kitchen's courtyard, and two gardens. Stable is a sort of an annex.



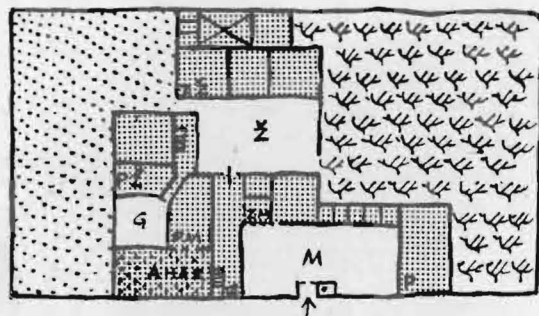
Men's courtyard with janitor's booth and shed. Stairs, left, lead to verandah, glazed now



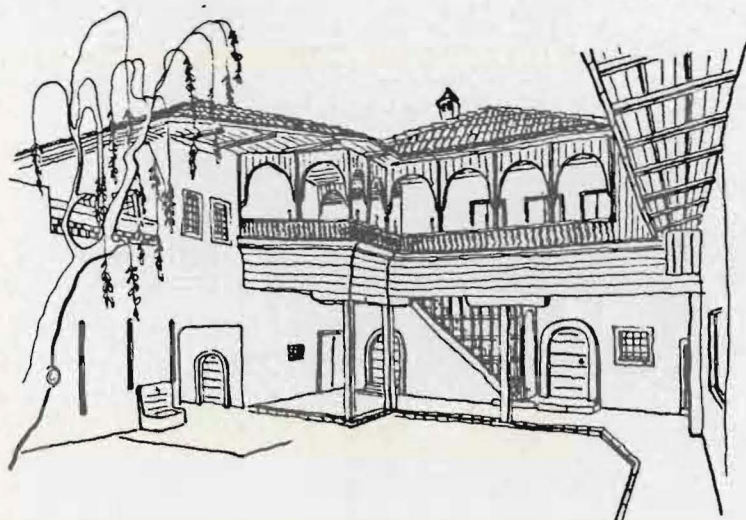
Men's courtyard

X. SKETCH OF A MOST COMPLETE DOUBLE DIFFERENTIATED HOUSE WITH THREE COURTYARD BETWEEN VEGETABLE GARDEN AND ORCHARD

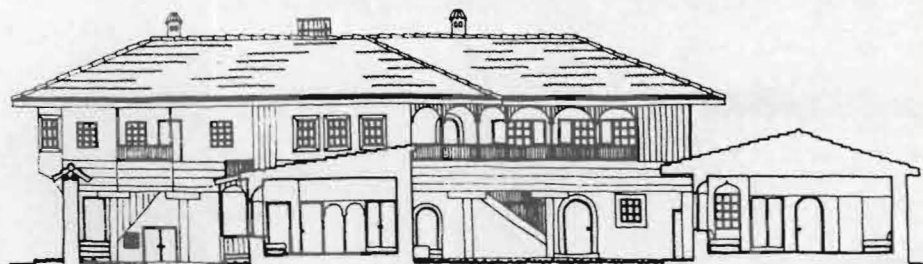
ZŽ women's winter house
 Ž women's courtyard
 PŽ summer women's house
 M men's courtyard
 PM winter men's house
 G utility courtyard
 stable
 lavatory
 vegetable garden
 orchard



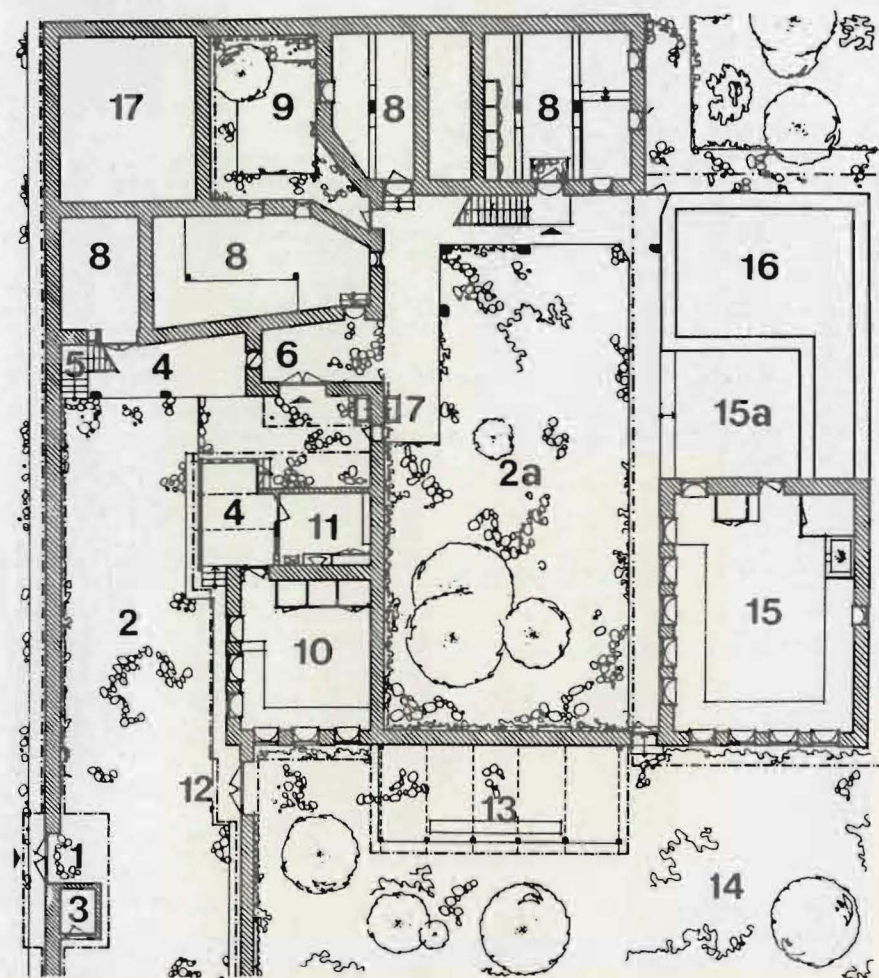
Women's courtyard



Cross section



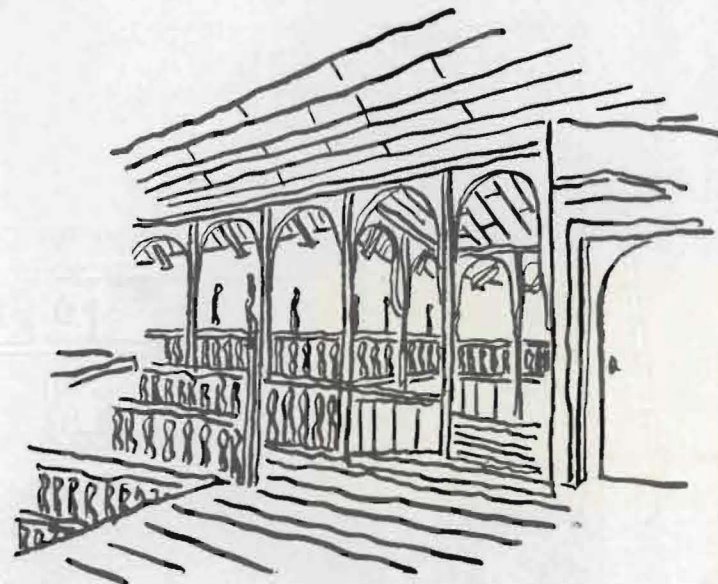
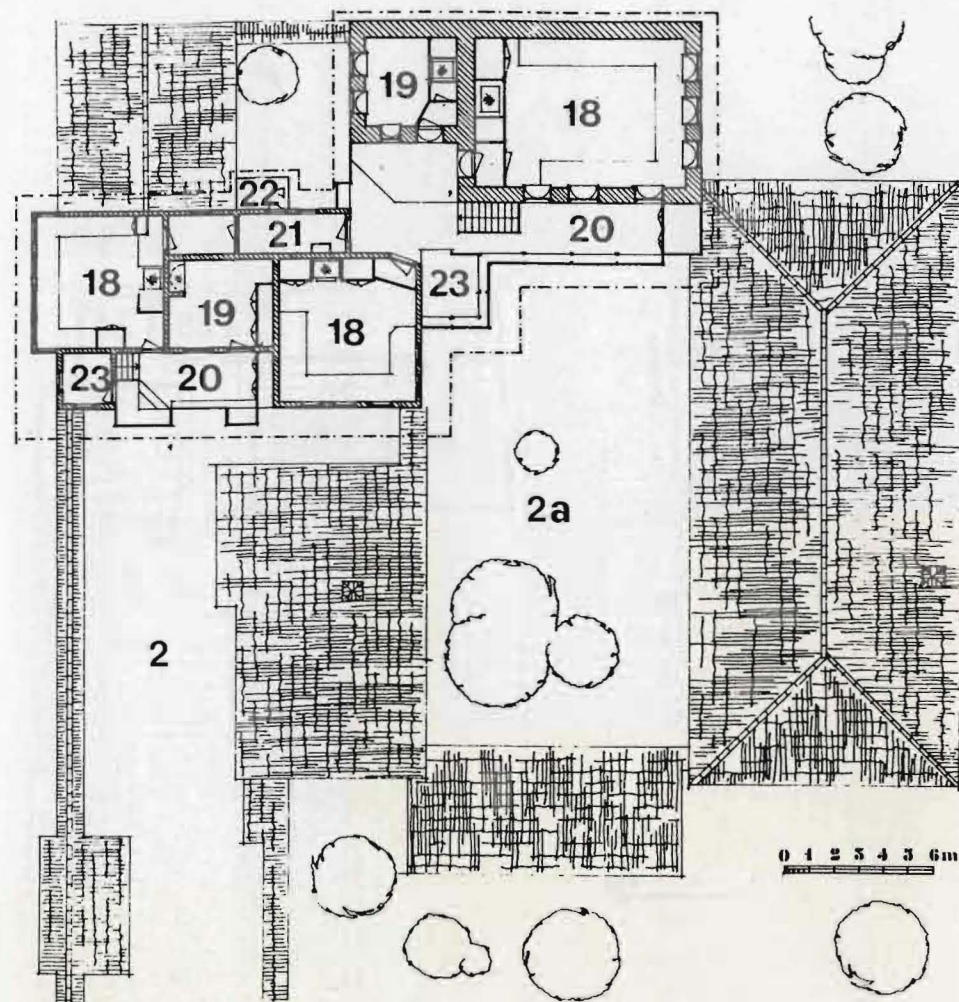
First floor



SVRZIN'S HOUSE — Glodina Street 4 — A most complete instance of a double differentiated house — winter and summer house, men's and women's house with men's and women's courtyard and differentiated garden (vegetable garden, orchard)

- | | | | |
|----|----------------------------|-----|--|
| 1 | entrance gate | 14 | garden |
| 2 | men's courtyard | 2a | women's courtyard |
| 3 | lavatory | 15a | women's anteroom |
| 4 | porch | 15 | women's room |
| 5 | staircase | 16 | winter kitchen |
| 6 | sofra — bower | 17 | stable |
| 7 | fountain | 18 | room on the upper floor (men's or women's) |
| 8 | storehouse | 19 | small room on upper floor (men's or women's) |
| 9 | summer kitchen | 20 | verandah (men's or women's) |
| 10 | men's room on ground floor | 21 | passage between men's and women's houses |
| 11 | janitor | 22 | lavatory |
| 12 | men's gate to the garden | 23 | raised part of verandah (men's or women's) |
| 13 | hambari — hay-loft | | |

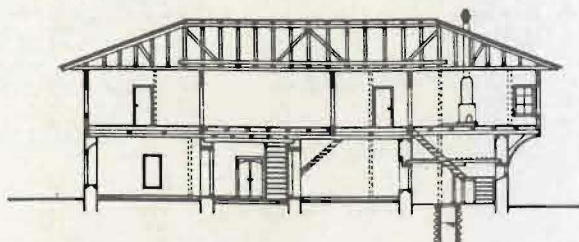
Second floor



Verandah with its raised part in women's quarters of the house

DŽERDŽELES ALI HOUSE — SAGRĐŽJA. ONE OF THE OLDEST HOUSES, WITH A LARGE GARDEN AND TWO COURTYARDS, AND MEN'S AND WOMEN'S DWELLING UNDER THE SAME ROOF

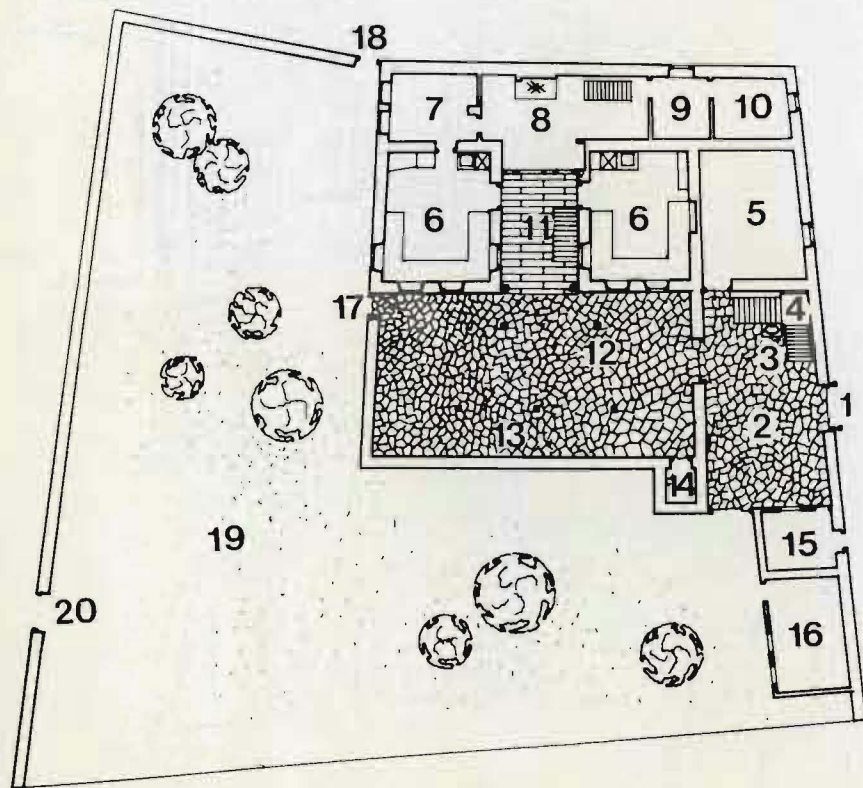
Cross section



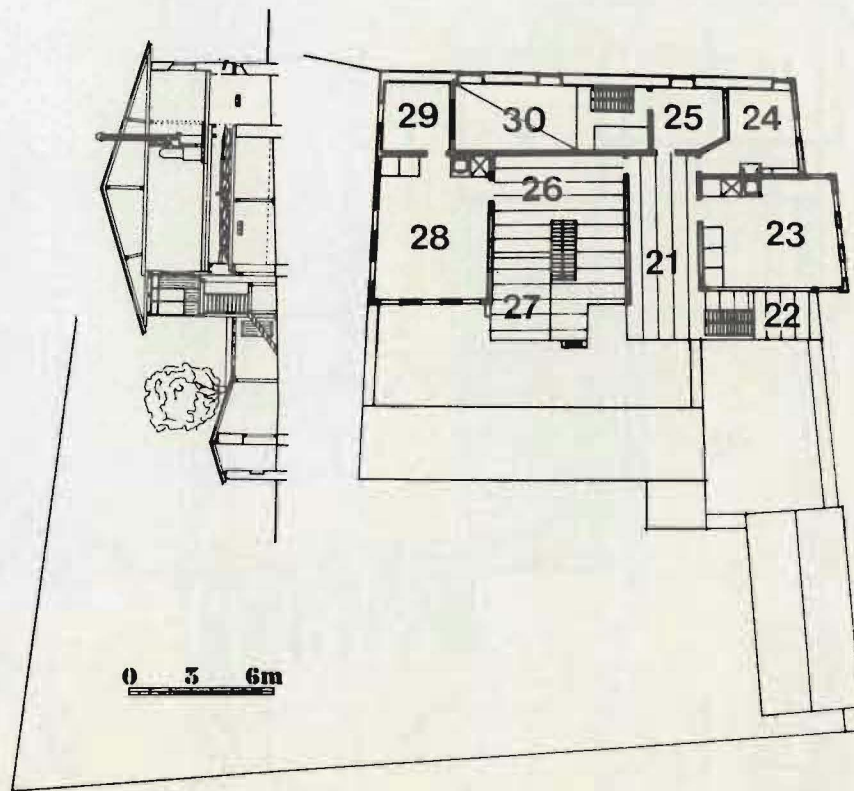
- 1 gate (entrance)
- 2 men's courtyard
- 3 bošluk — room below divhana
- 4 stairs
- 5 storehouse
- 6 room on ground floor
- 7 small room
- 8 kitchen
- 9 storeroom
- 10 storeroom
- 11 anteroom
- 12 women's courtyard
- 13 summer kitchen
- 14 lavatory
- 15 janitor
- 16 tool shed

- 17 kapidžik — small gate between women's courtyard and garden
- 18 exit
- 19 garden
- 20 komšimka — gate between adjacent gardens
- 21 men's verandah with stairs
- 22 men's raised part of verandah
- 23 room on the upper floor
- 24 small čardak
- 25 dressing room
- 26 women's verandah
- 27 women's raised part of verandah
- 28 room on upper floor
- 29 small čardak
- 30 chimney in a two-storey kitchen

First floor



Second floor

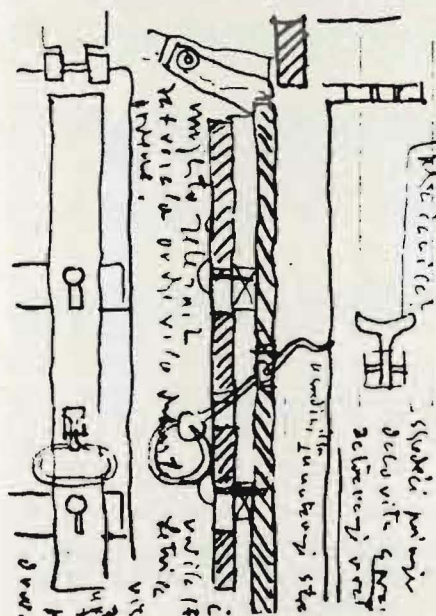




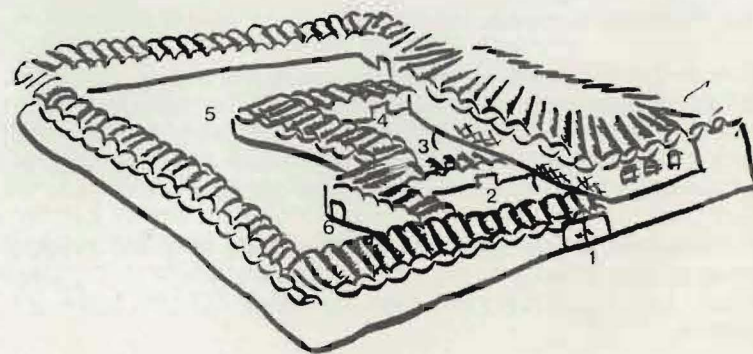
Women's courtyard in the Džerdželes Ali's Houses with small gate between women's courtyard and the garden



Džerdželes Ali's House — Wiew from the street

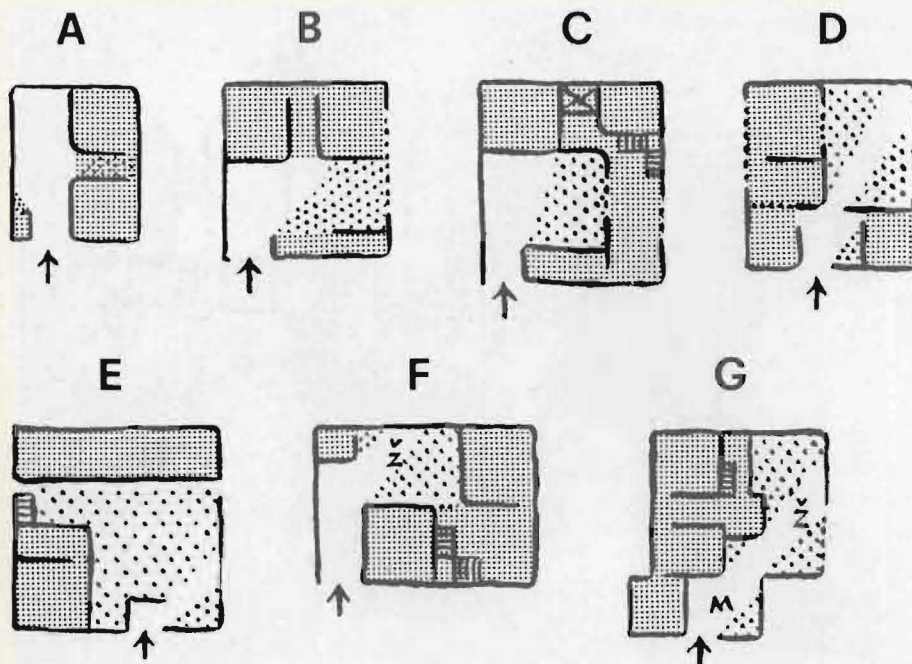


Zvekir — door knocker



Situation of the Džerdželes Ali House

- 1 gate
- 2 men's courtyard
- 3 women's courtyard
- 4 small gate between women's courtyard and garden
- 5 garden
- 6 lavatory
- 7 gate between adjacent gardens



XI. GATE, SITUATION (ENTRANCE) IN RELATION TO HOUSE — VIEW SCREENING

dark — house, utilities and household rooms
 dark — house, utilities and household rooms
 light — courtyard
 dotted — screened area, seen from entrance gate
 M — men's courtyard
 Z — women's courtyard

C. We enter through one gate traverse the men's and women's courtyards and the vegetable garden at one side of the house while we return through the orchard and accross the farm yard on the other side of the house to another gate.

This system is found where the house is placed between two courtyards each of which is provided with a gate.

An important role in the formation of communications is played by the passages — gates between the different areas. They are usually placed in diagonally opposite corners in order to prevent the direct view.

The ways are laid out with a view to ensure maximum cleanliness. The living quarters must be separated from the farm premises by fences.

In this manner paths developed which are basically different from the Roman or Renaissance straight ways.

A. In order to screen off the interior of the housen from the curious eyes at the gate, the house is placed at right angls opposite the gate.

B. The gate is placed in one corner of the fence opposite the house with a central ground plan.

C. The gate is placed in one corner of the fence opposite the house with an asymmetric ground plan and the hayat in the diagonally opposite corner.

D. The house placed at right angles to the gate meanders in such a manner that one wall of the hayat lies in the axis of the gate owing to which a deviation must be made in order to reach the house from the gate.

F. The façade of the house is turned toward the gate and has an L shaped ground plan in the inner corner of which the open and half closed spaces are hiding from the looks of those passing the gate.

4b. Exterior Circulation

This is the circulation between the courtyard and the garden. It depends on the differentiation of the courtyard (men's, women's, and farm) and garden (orchard and vegetable), on the situation of the house in the courtyad (whether it is placed in the middle or at one side of the yard) and, finally, on the number of entrance gates.

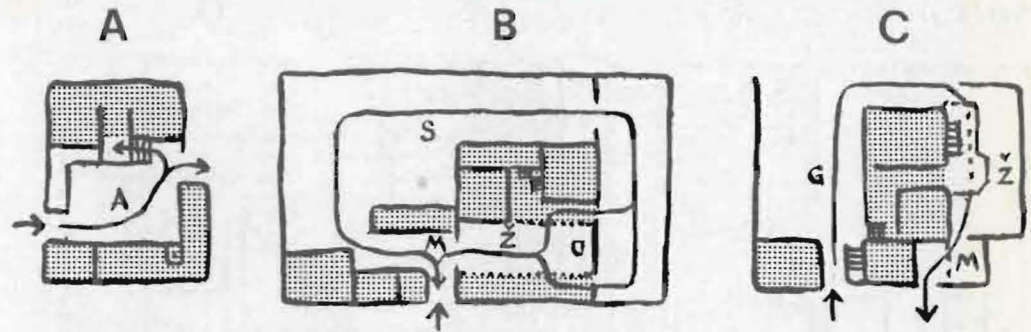
Circulation must be such that one area can be either isolated from the other or connected with the other so that the whole site can be inspected in one run. There are three ways by means of which this can be accomplished.

A. From the street we come through the gate into the courtyard and garden and return by the same way. This system is usually found in undifferentiated yards with one gate and the house placed at one side of the yard.

B. If the house is placed in the middle of the courtyard with one gate then we come from the street through the gate into the courtyard whence we proceed to the gardens and return by another way to the gate.



Entrance gate



XII. THREE WAYS OF EXTERIOR CIRCULATION

dark — house and utilities
 light — courtyard
 M — men's courtyard
 M — men's courtyard
 Z — women's courtyard
 G — utility courtyard
 S — orchard

B. C. Sometimes the open and half closed utility rooms under the triem are hidden at the same side at which the gate is placed. Sometimes they are placed with the backwall toward the gate and street.

The half closed divhana likewise is placed against the wall of the court and is often raised over the gate which, consequently, shows a peculiar development. The opening of the gate is fairly deep and mostly formed by the walls of the adjacent utility rooms placed together with the gate under the same trijem (porch).

E. Sometimes a small roofed or opened enclosure develops before the gate which protects the interior from curious looks.

F. G. If this enclosure is largen then it is used as a men's courtyard placed between the street and the women's courtyard. In this manner the private area is isolated from the public.

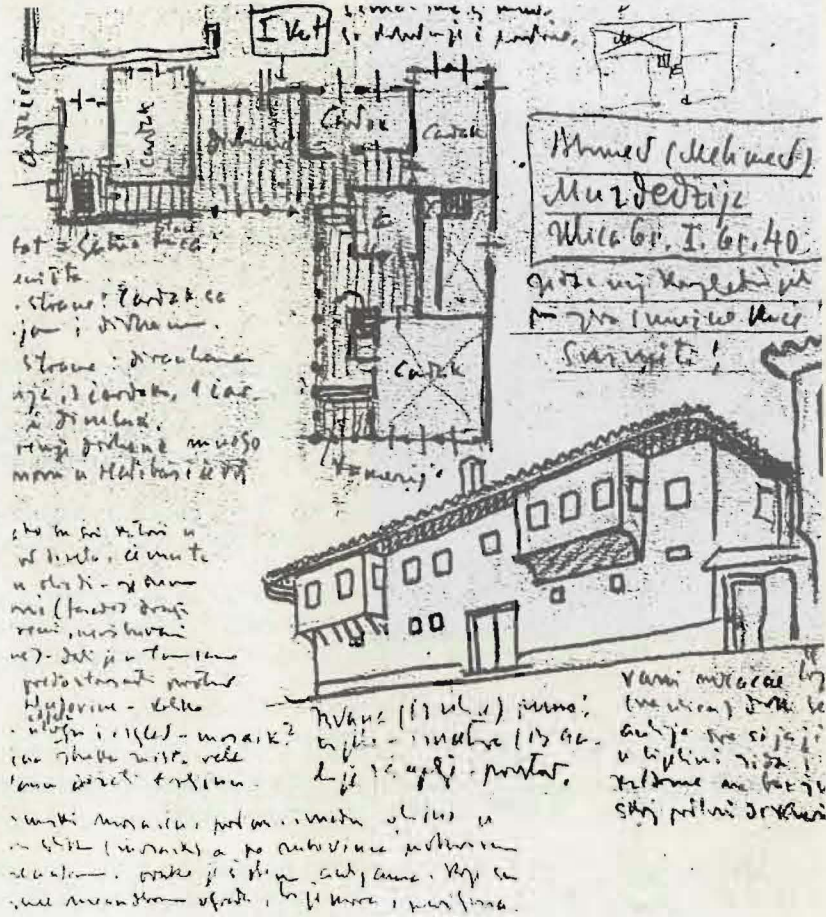
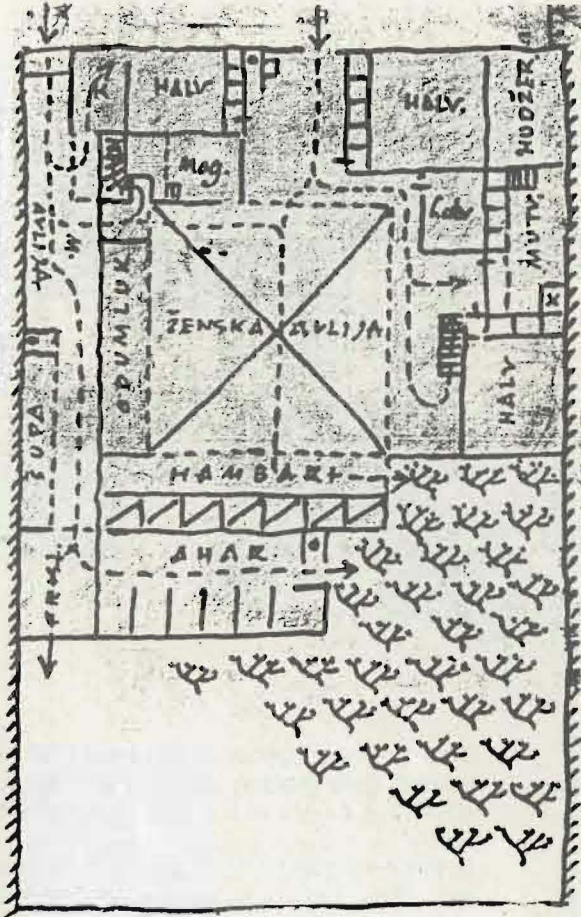
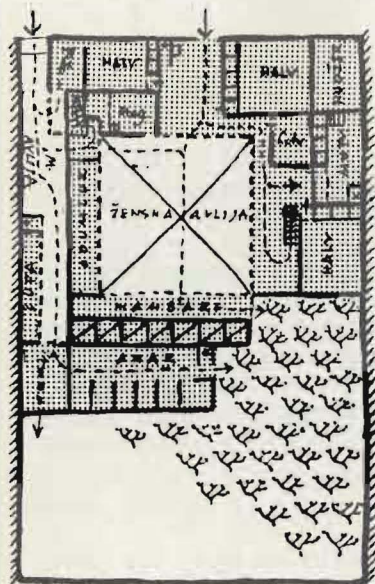
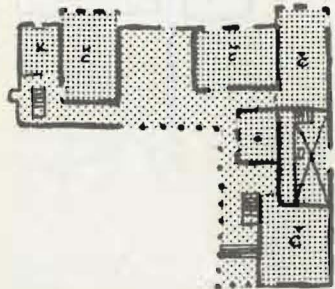
The gates of the interior show a similar development. That they played an important role in the life of the tenants can be seen from the fact that they were given special names as soon as they had become differentiated. We know the men's, women's, farm and middle gate, the kapijik and komshimka. The men's, women's, and farm gates are placed between the street and the men's, women's, and farmyards, respectively; the middle

gate is placed between the men's or farmyard and the garden; kapijik is a small gate leading from the women's courtyard to the garden; the komshimka is a gate in the wall separating adjacent gardens.

In the beginning efforts were made to hide private areas from the public with diagonal, meandering and rotating paths and ways. Eventually various structures were erected along these ways each of which is very devious and all of which together form a most harmonious spatial pattern. Thus we can see that this system of ways is basically different from that of the Baroque where the whole pattern can be looked over from one central point.

XIII. EXTERIOR CIRCULATION

dark — house and utilities
light — men's, women's courtyards,
garden

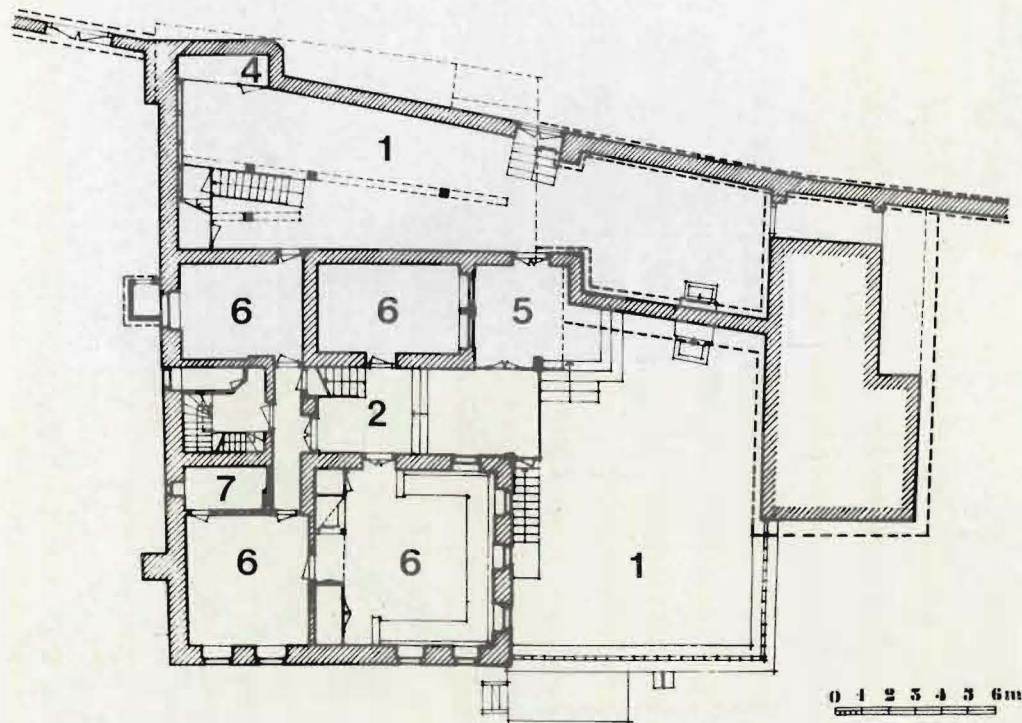


One of the most complete instances of a rich house (Ahmed-Muzdedži's), Street I, no. 40
 Passage organization in courtyards upper floor spaces
 Entrance gate, men's courtyard, shed, haylofts, stable
 Middle gate, women's courtyard: small gate between women's courtyard and vegetable garden, orchard
 Exit from utility courtyard

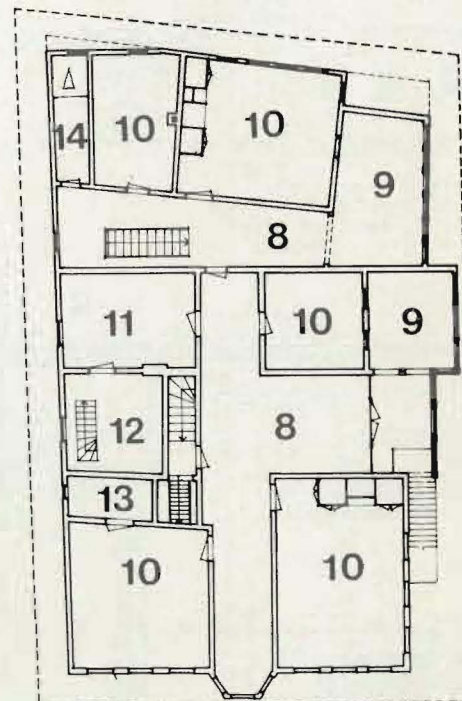
OLD MOSLEM MEN'S AND WOMEN'S HOUSE — Kozaračka Street 3

- | | |
|------------------------|---------------------------|
| 1 courtyard | 8 verandah |
| 2 anteroom | 9 raised part of verandah |
| 3 storehouse (cellar) | 10 room on upper floor |
| 4 shed | 11 kitchen |
| 5 room for slippers | 12 storeroom |
| 6 room on ground floor | 13 bath |
| 7 bath | 14 lavatory |

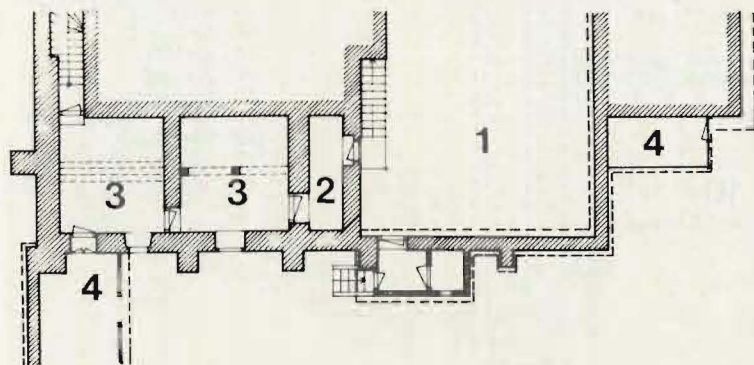
First floor



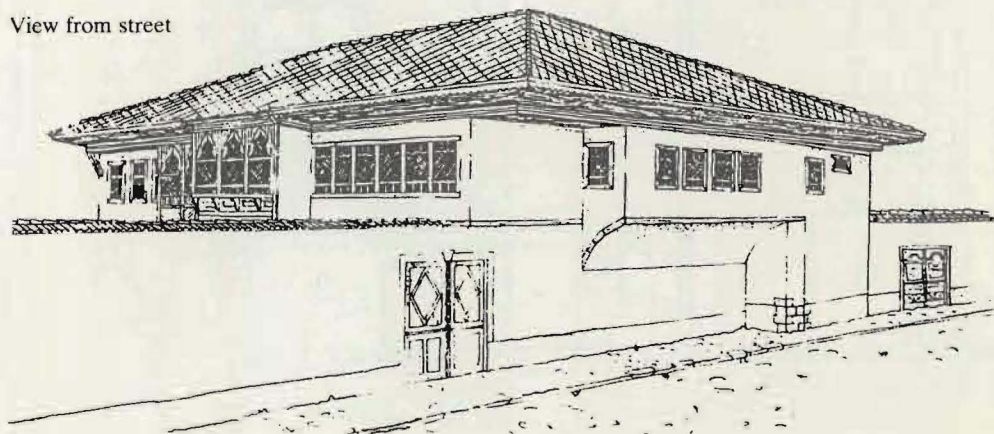
Second floor



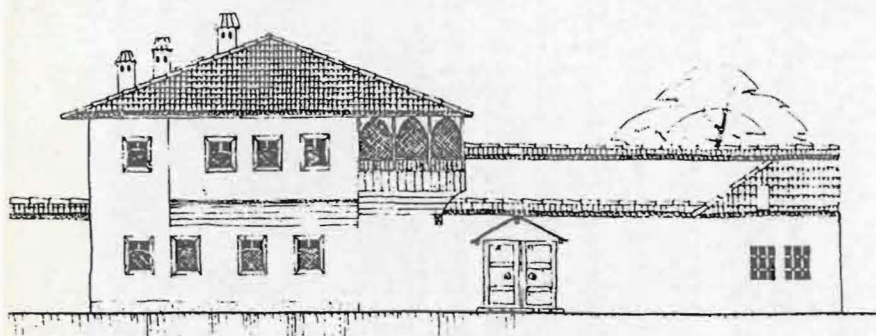
Cellar



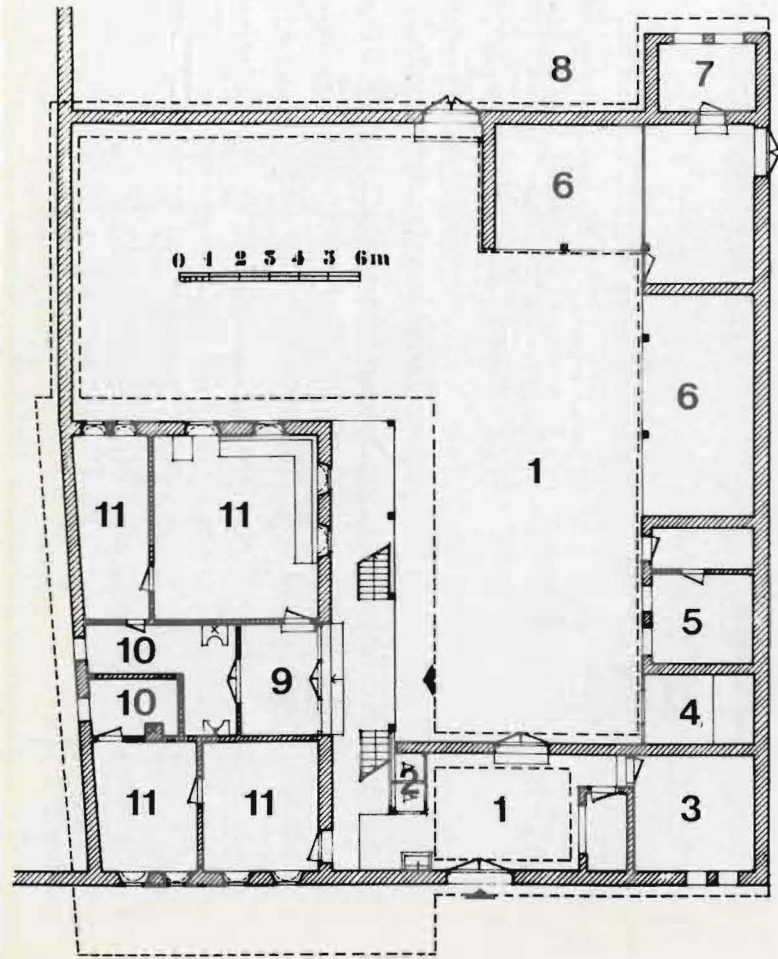
View from street



Façade

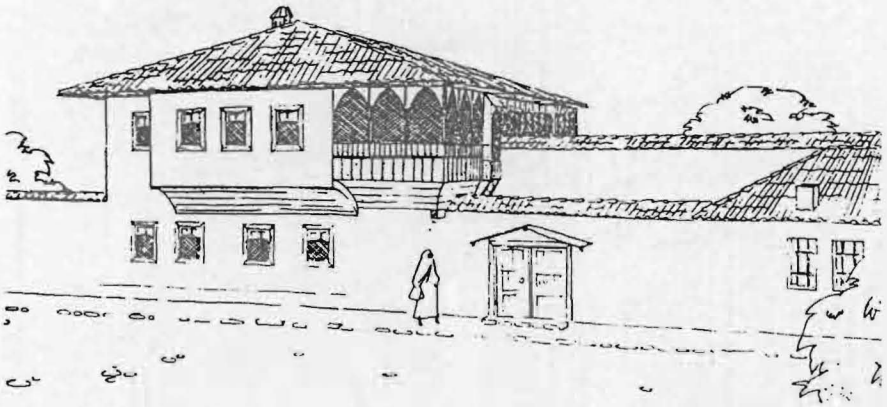


First floor

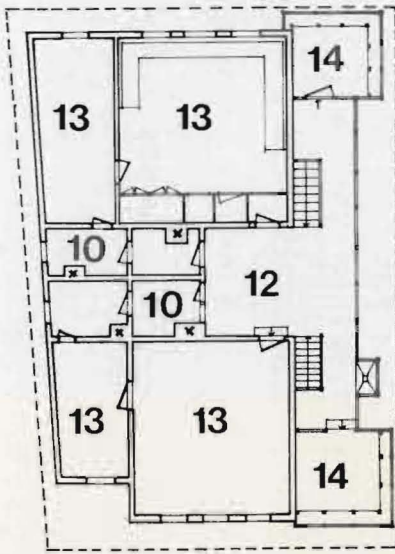


OLD MEN'S AND WOMEN'S HOUSES WITH SUMMER AND WINTER DWELLINGS
— Skenderija Street

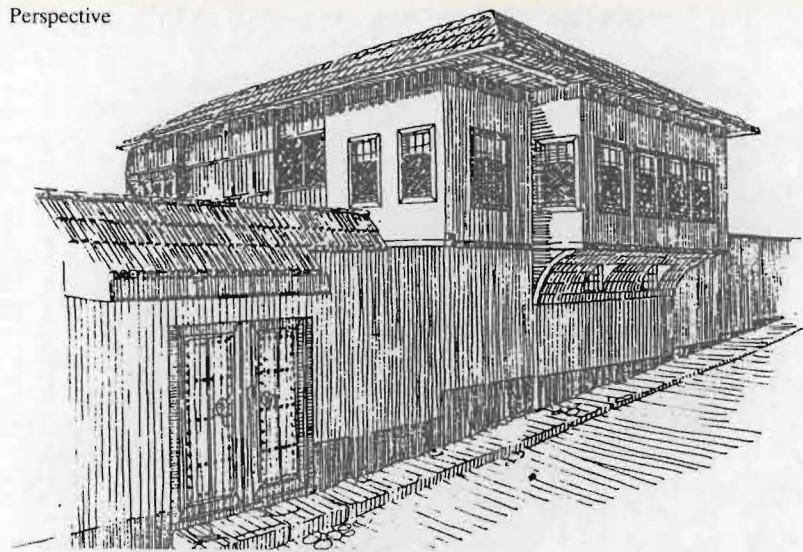
View from street



Second floor

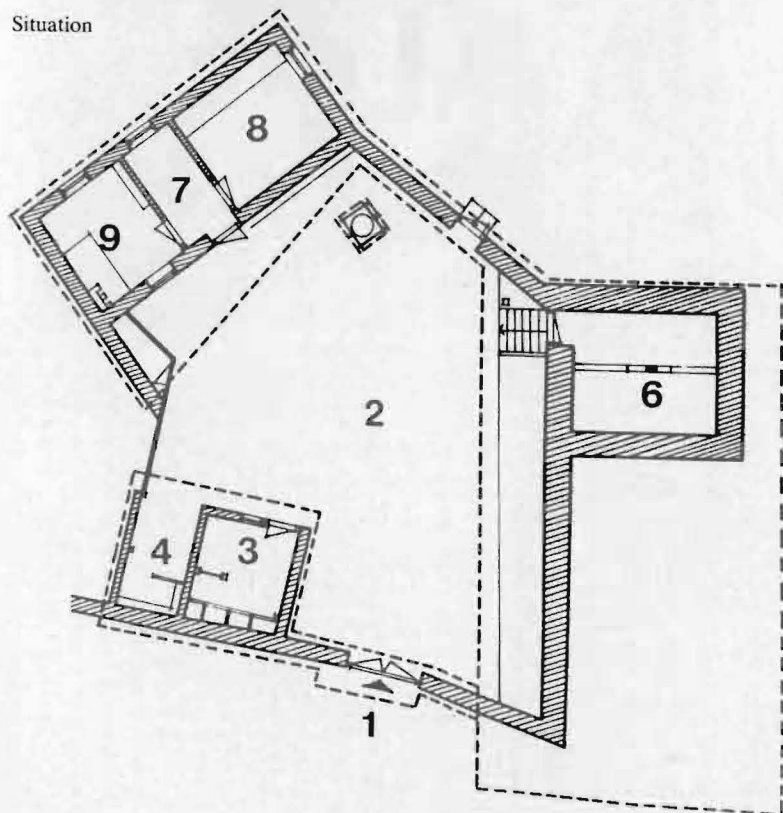


- 1 courtyard
- 2 lavatory
- 3 janitor
- 4 shower
- 5 room on ground floor
- 6 stable
- 7 cattleman
- 8 garden
- 9 passage
- 10 kitchen
- 11 room on ground floor
- 12 verandah
- 13 room on upper floor
- 14 raised part of verandah

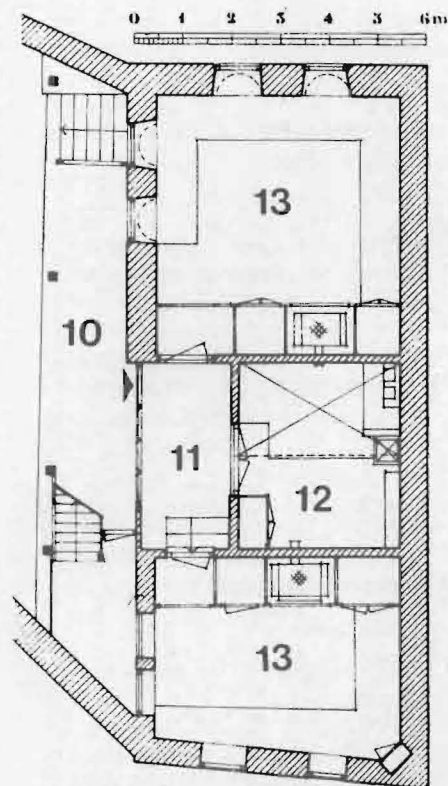


- 1 gate (entrance)
- 2 courtyard
- 3 stable
- 4 lavatory
- 5 fountain
- 6 storehouse (cellar)
- 7 anteroom
- 8 kitchen
- 9 laundry
- 10 porch
- 11 anteroom
- 12 kitchen with chimney
- 13 room on ground floor
- 14 verandah
- 15 room on upper floor
- 16 small čardak
- 17 garret entrance
- 18 chimney

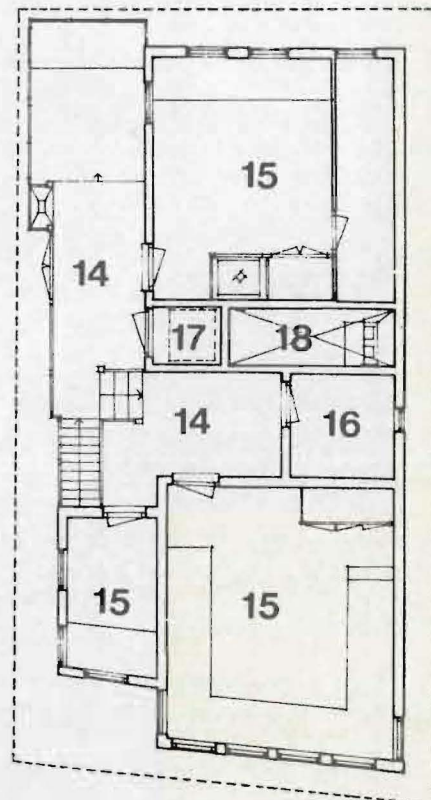
Situation



First floor



Second floor



B. Collective Dwelling Houses

The oriental house is usually a single-family detached or semidetached house. Sometimes, however, it is also a row house. This, of course, does not mean that multifamily buildings do not exist in the Orient. These are usually houses for bachelors among which monasteries and schools of divinity can be counted, further hans, co operative buildings and apartment houses arranged in blocks around common interior communications and accessory buildings. The apartment houses were inhabited by the town proletariat.

TWO KINDS OF COLLECTIVE BACHELOR HOUSES

Typical instances of Oriental collective dwelling houses are hotels and bachelor houses.

A. The bachelor houses are usually two-storied. They contain on the open ground floor the janitor's flat, privies, and the usual conveniences. On the first floor are placed the common dormitories beside the common stairs, divhana and kameriya.

These buildings are usually similar to one-family houses from which they differ only in size.

To the bachelor houses belong also the monasteries and schools of divinity. The latter differ from the former only in that they contain also prayer halls and lecture-halls.

The monasteries consist of the janitor's flat and the usual conveniences on the ground floor, and the prayer hall, chardak, divhana, stairs, and kameriya on the first floor (Monastery Mevleviya).

The schools of divinity are usually one-storied and consist of numerous cells each of which is made up of a hayat and a halvat. Then there are a lecture-hall and, of course, the usual conveniences. The rooms, in front of which is a triem, are arranged around a courtyard with a mighty tree in the middle (At-meydan Medressa).

Sometimes the halvats and the lecture-hall are placed around a fine atrium with a fountain in the middle. In this case the conveniences are placed behind the main building and accessible by winding corridors. (Husrev Bey's Medressa.)

B. H a n s are hotels for travellers and business men. They are usually two-storied buildings placed around a small atrium.

On the first floor there are a divhana (café), bedrooms, and lavatories, all deployed along a central corridor. The corridor has no ceiling and is venti-

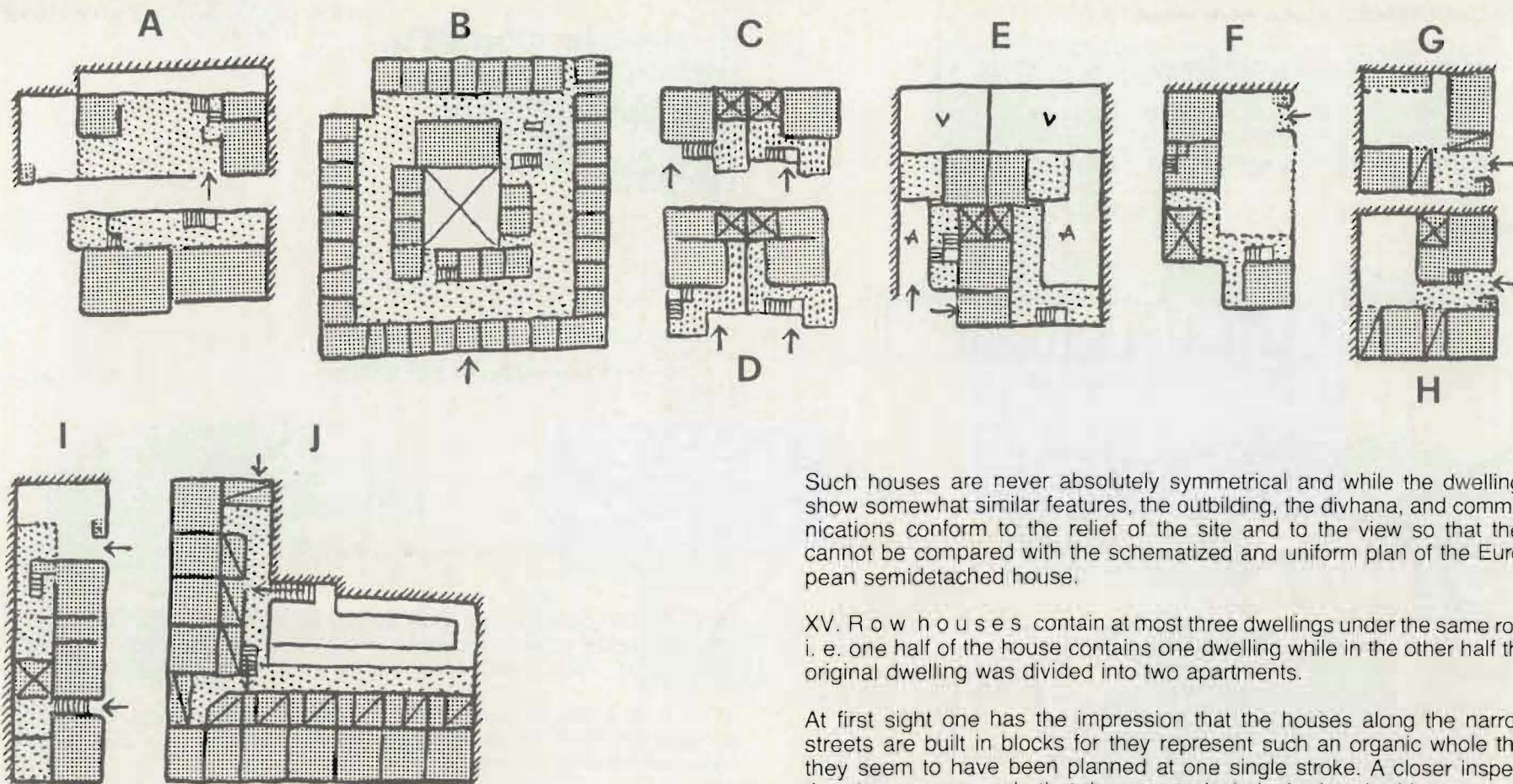


Individual serial houses

lated and lighted through a clerestory. In the inner corners of the stairs are kameriyas. The ground floor usually consists of nothing but pillars among which stables and store rooms are placed. (Morich Han.)

TWO KINDS OF DWELLINGS UNDER THE SAME ROOF

C. D. E. The semidetached house. It is usually held that the semidetached house resulted simply from the division of a detached one: a father who had two sons divided his house into two equal parts into which his sons moved at soon as they got married. Yet this view seems erroneous because the asymmetric ground plans of the two dwellings show that it would often have been impossible to develop them from the symmetric ground plan of the house.



XIV. TWO KINDS OF COLLECTIVE DWELLINGS, TRANSITION FROM COOPERATIVE TO COLLECTIVE HOUSE

- A — Bachelors' dwelling
- B — Hotel (quarters for the night)
- C D E — Double house
- F G H I — Cooperative house
- I — Cooperative house with a common kitchen
- J — Collective house

- light — courtyard
- dotted, light — kapakli avlija, covered courtyard
- dark — house
- A — courtyard
- V — garden
- ← — entrance

Such houses are never absolutely symmetrical and while the dwellings show somewhat similar features, the outbuilding, the divhana, and communications conform to the relief of the site and to the view so that they cannot be compared with the schematized and uniform plan of the European semidetached house.

XV. Row houses contain at most three dwellings under the same roof i. e. one half of the house contains one dwelling while in the other half the original dwelling was divided into two apartments.

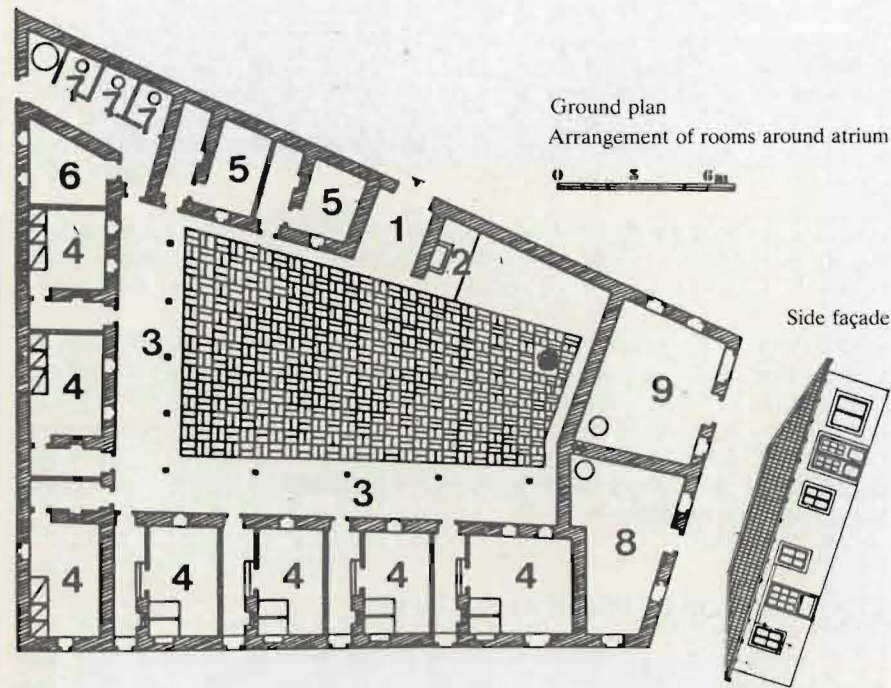
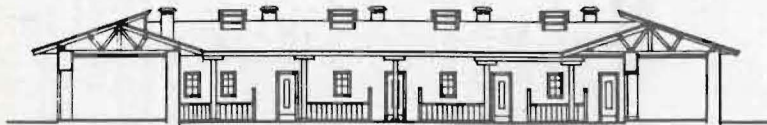
At first sight one has the impression that the houses along the narrow streets are built in blocks for they represent such an organic whole that they seem to have been planned at one single stroke. A closer inspection, however, reveals that they are typical single detached houses connected by fences and porches into harmonious units. They were constructed at different times by different builders yet with a keen feeling for scale and discipline.

TWO KINDS OF COMMON APARTMENTS

Here a distinction should be made between the one-family cooperative houses located around common outer or courtyard communications on the one hand, and the collective family apartments around common interior communications, on the other.

F. G. H. I. Cooperative houses represent a transition from the individual house to the collective apartment buildings. They consist of several one-or-two-storied one-family houses, the ground plan of which is of a lower order. The buildings are arranged around a common courtyard with

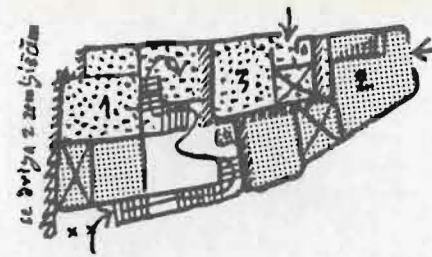
Cross section



Façade



View from street



XV. HOUSE IN SERIES WITH THREE DWELLINGS

- 1 entrance courtyard
- 2 fountain
- 3 courtyard with a tree and porch in front of rooms
- 4 room
- 5 kitchen
- 6 storehouse
- 7 lavatory
- 8 janitor's dwelling
- 9 tailor's workshop

a common kitchen, woodshed, privy, fountain, gate, and sometimes also a stable and garden.

Such an arrangement very likely sprang up when individual members of the cooperative got married and moved from the main building into their own annexes. Such houses are usually found in the suburbs.

In the town itself, however, where less ground was available, the houses press closer together till they come under the same roof and become collective dwelling houses.

J. Having developed communications of the individual house, the builders gained enough experience to embark upon the task of designing a collective house.

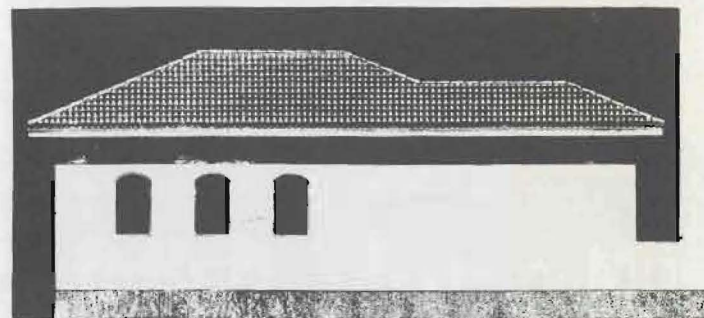
The Kitchen of the Collective House

In the formation of such a house an important role was played by the winter kitchen. The chimney not having been known, the whole kitchen was opened into the garret owing to which the apartments could not be laid out one over another. The resulting structure was a two-storied house extending in the horizontal plane. The ground floor consists mainly of pillars and forms a kind of yard.

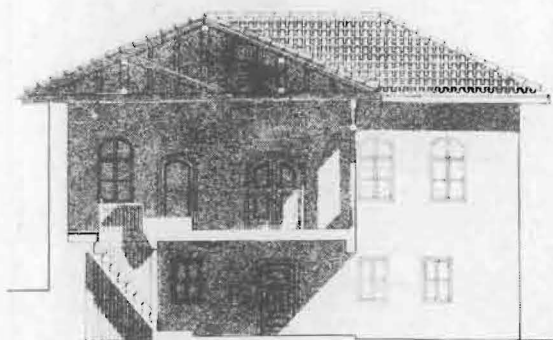
These houses are usually placed parallel to the street, they have a small skylight in the roof, and are very similar to European row houses from which they differ only in that they are much lower and more plastic.

MEVLEVİY TEKIYA (MONASTERY)

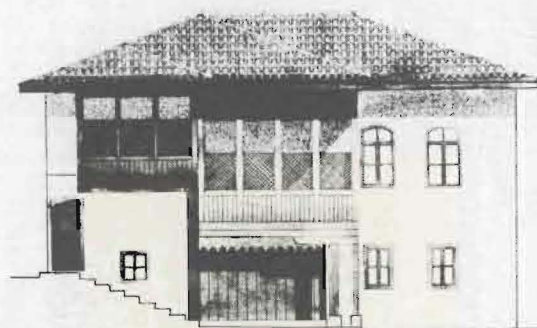
Façade — view from street



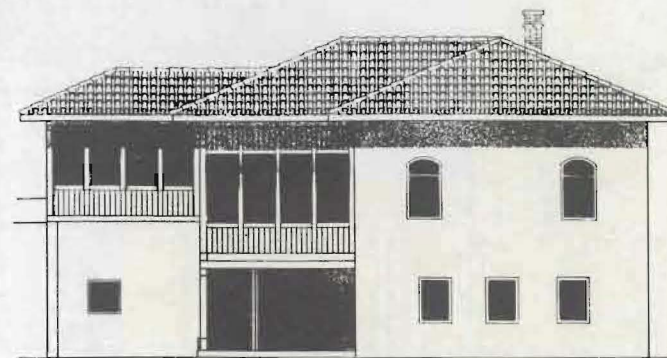
Cross section



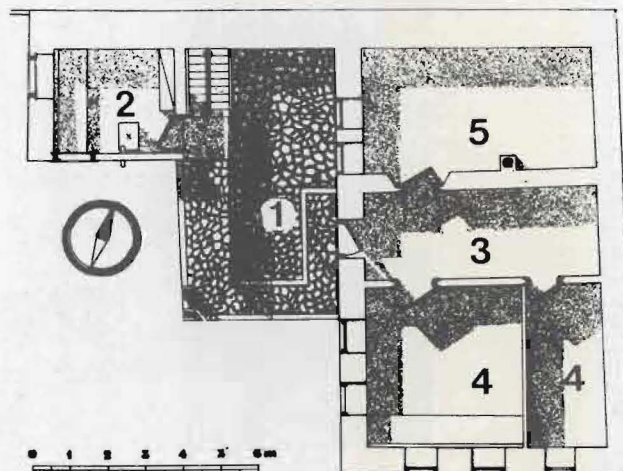
Side façade



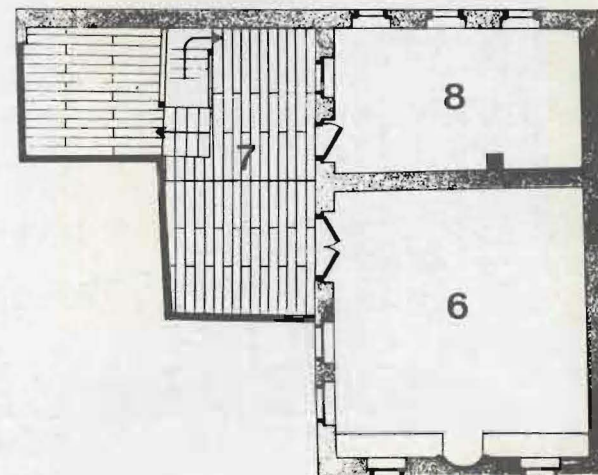
Façade — view from courtyard



First floor



Second floor

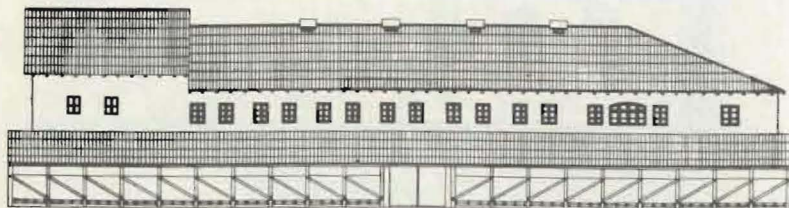


- 1 courtyard
- 2 summer kitchen
- 3 anteroom
- 4 room on ground floor
- 5 storeroom
- 6 livan (oratory)
- 7 verandah
- 8 room on upper floor

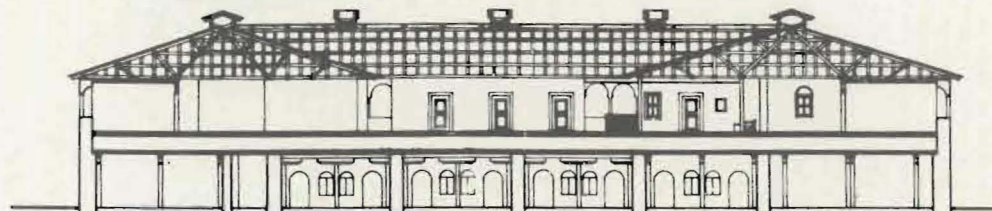


MORIČA HAN — formerly quarters for the night with stables, at present: restaurant on first floor, café and office premises on the second one. The original building dates from the 17th century.

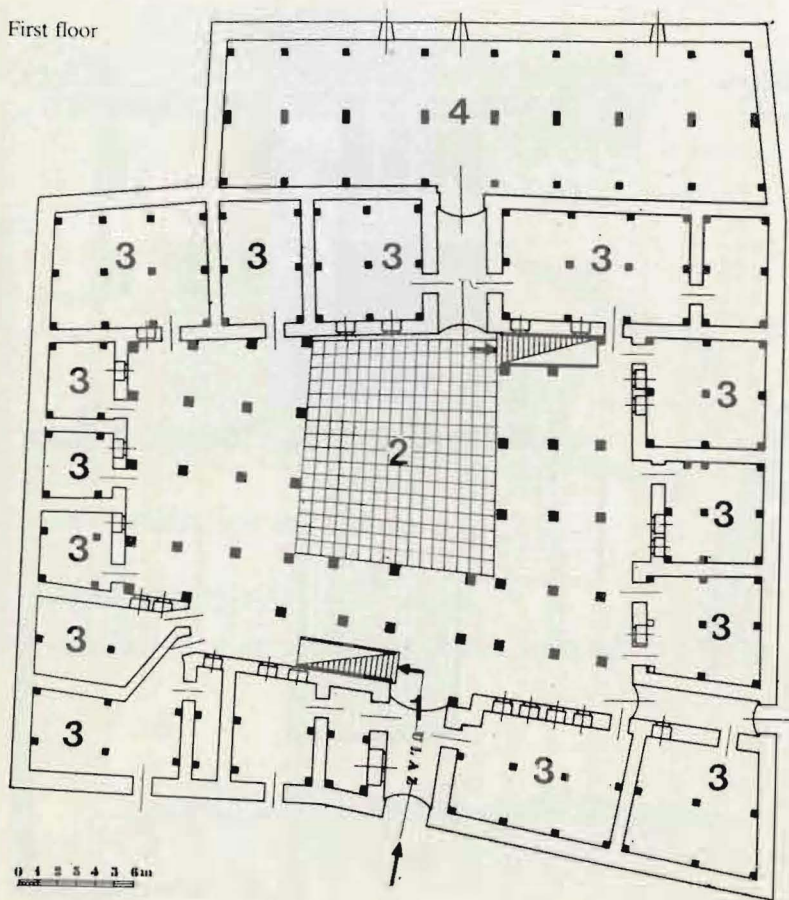
Façade



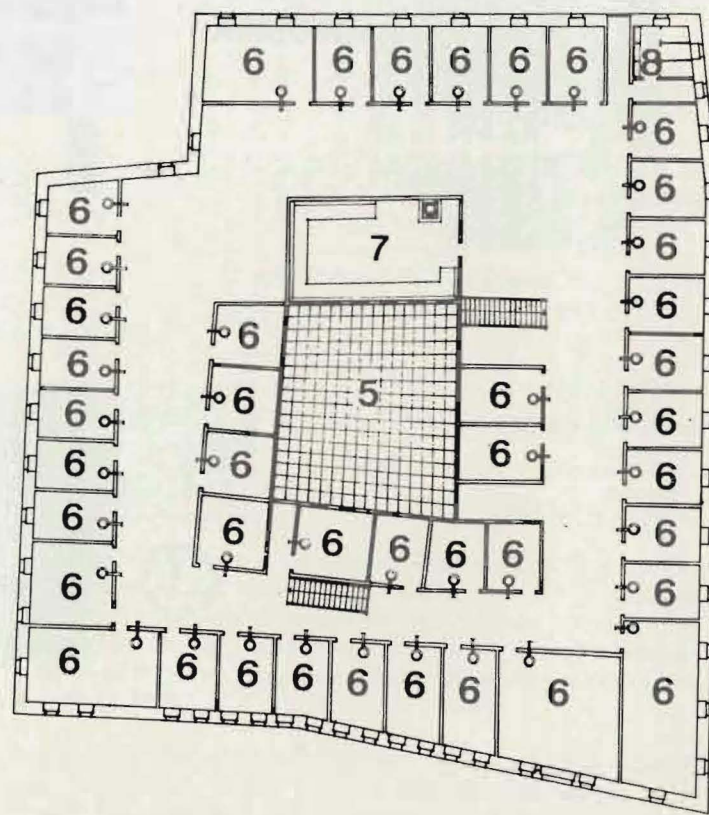
Cross section



First floor



Second floor



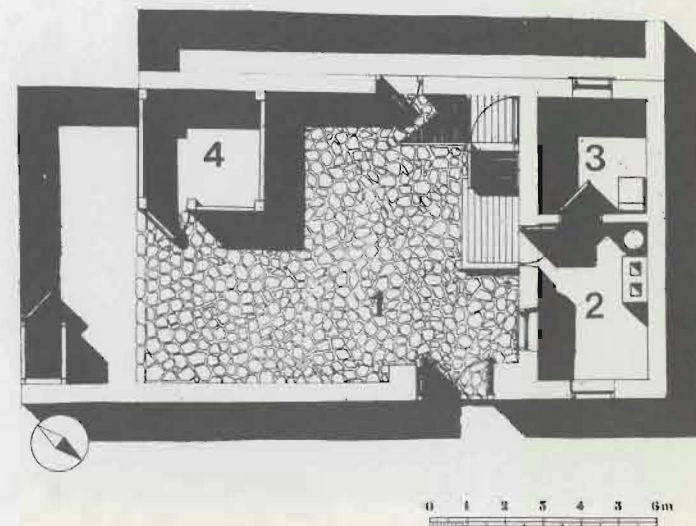
- 1 entrance
- 2 courtyard
- 3 storehouses
- 4 stable
- 5 atrium
- 6 room
- 7 verandah with stairs
- 8 lavatory



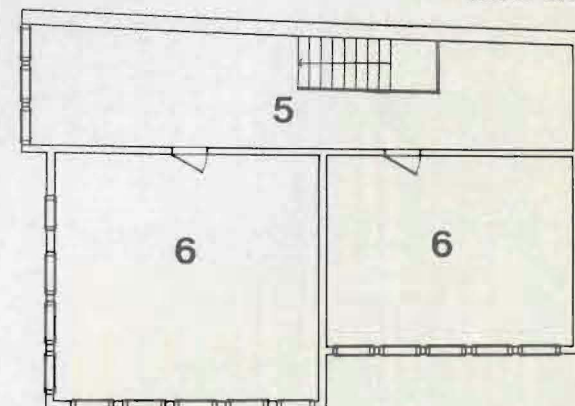
Morić's Han

BACHELORS' COLLECTIVE HOUSE — ONE-STORIED, BUILT AS ANNEX —
Čemerlina Street 49

First floor



Second floor



- 1 courtyard
- 2 room
- 3 kitchen
- 4 shed
- 5 verandah on upper floor
- 6 common dormitory



Circulation in Common Houses

The cooperative houses are not, as it is often contended, similar to ant-hills but complex formations of low order, ground plans arranged around highly developed communications (courtyard, divhana).

Circulation is either interior or exterior depending on whether the house is a cooperative or a collective one. There are, of course, numerous transitions between the two.

In a cooperative house the single structures are deployed around a common courtyard and outer circulation is roofed. Circulation reached its highest degree of development in the so-called »3 D way« and in the interior circulation of the collective dwelling house.

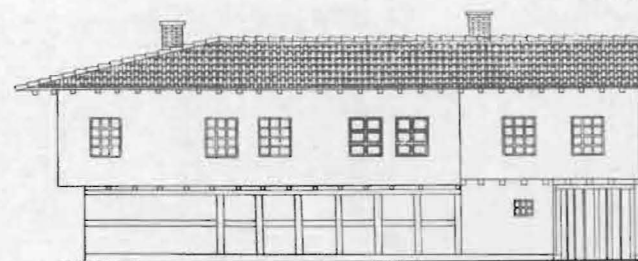
THE COLLECTIVE DWELLING HOUSE

A. B. Let us begin with the collective house located in the suburbs. The single structures are arranged around a common courtyard and so are the usual conveniences.

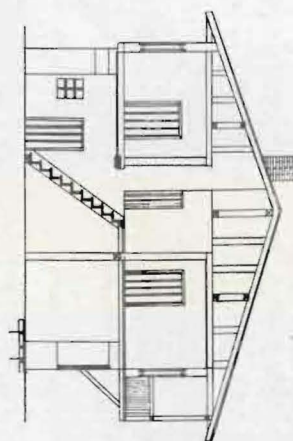
C. D. Owing to the cramped conditions prevailing in towns, the houses press closer and eventually come under the same roof. The ground plan

ONE-STORIED CORNER MULTI-FAMILY HOUSE WITH BAKERY ON FIRST FLOOR

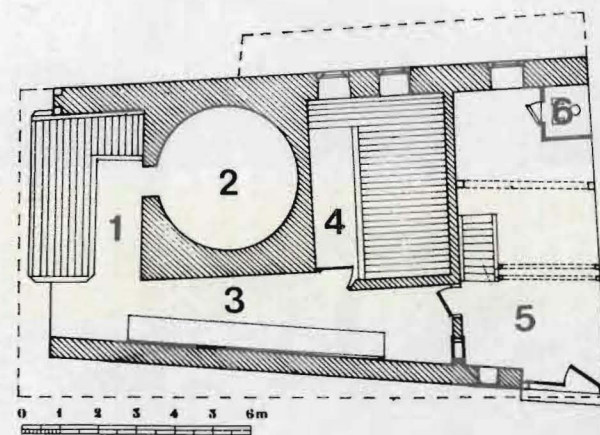
Façade



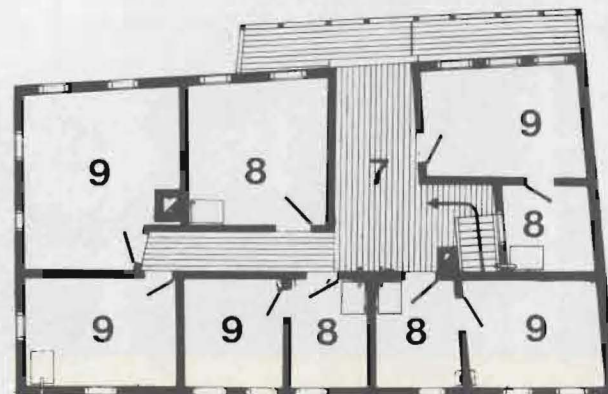
Cross section



First floor



Second floor

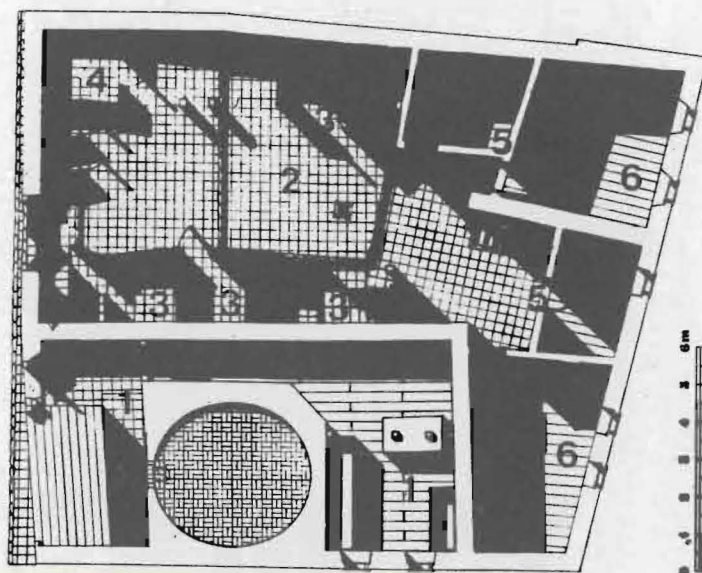


- 1 bakery
- 2 oven
- 3 passage
- 4 hamerluk (place for kneading bread)
- 5 anteroom
- 6 lavatory
- 7 verandah with stairs and balcony
- 8 kitchen
- 9 room

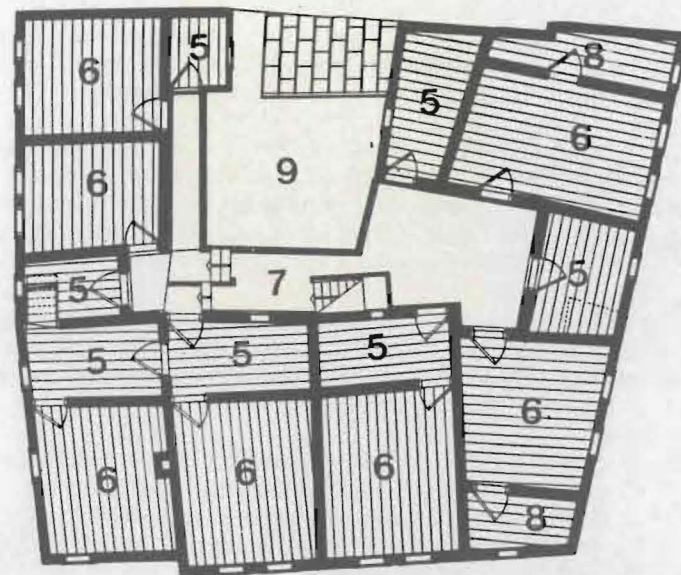
**ONE-STORIED MULTI-FAMILY HOUSE BUILT AS AN ANNEX WITH
HYPAETHRON AND BAKERY ON FIRST FLOOR — Sagrdžije 8**

First floor

- 1 bakery
- 2 anteroom
- 3 shed
- 4 lavatory
- 5 kitchen
- 6 room
- 7 verandah with stairs
- 8 storeroom
- 9 hypaethron



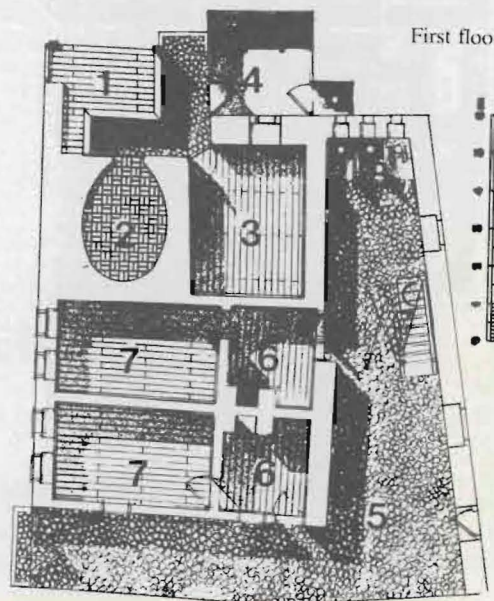
Second floor



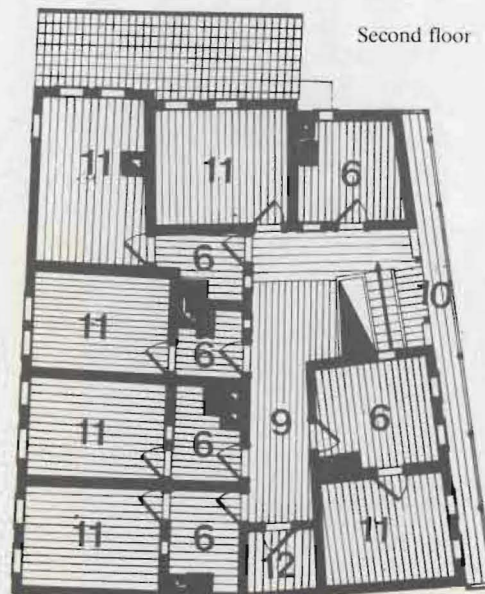
**ONE-STORIED CORNER MULTI-FAMILY HOUSE WITH A BAKERY ON FIRST
FLOOR — Abdesthana 43**

- 1 bakery
- 2 oven
- 3 room for kneading bread
- 4 odumluk — woodshed
- 5 kapakli avlija — covered courtyard
- 6 kitchen
- 7 room on ground floor
- 7 room on upper floor
- 8 lavatory
- 9 verandah
- 10 raised part of verandah
- 11 storeroom

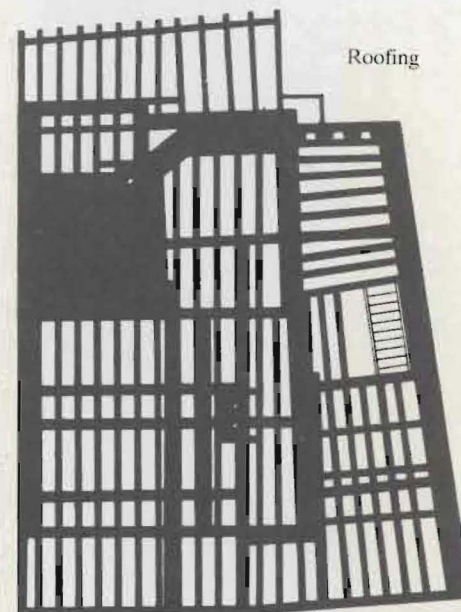
First floor



Second floor



Roofing



of these houses is L shaped. This is the transition stage from the cooperative to the collective house.

E. F. In the town itself, where the lots are even narrower, the apartments are placed on the first floor and the bakeries, workshops, janitor's rooms, and other conveniences together with the communications on the ground floor or covered courtyard.

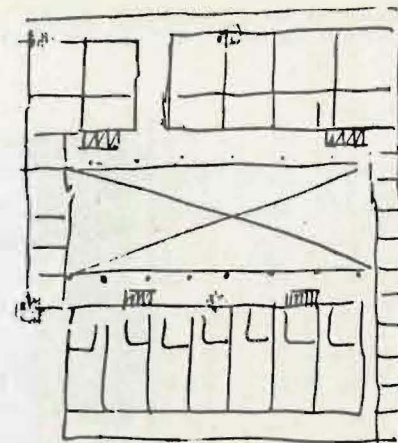
If the building site is large enough, the roofed courtyard widens, it is provided with a skylight in the roof, and contains an atrium. These houses are usually two-storied containing on the first floor apartments of the embryonic plan: hayat — halvat, or kitchen — halvat, or hayat — mutvak — halvat, all placed around a common divhana.

The divhana is fully developed because all experiences gained in previous structures were utilized. Like the hayat, the divhana opens into the out-of-doors and spreads spider-like its corridors to the apartments, the kameriya and the ground floor.

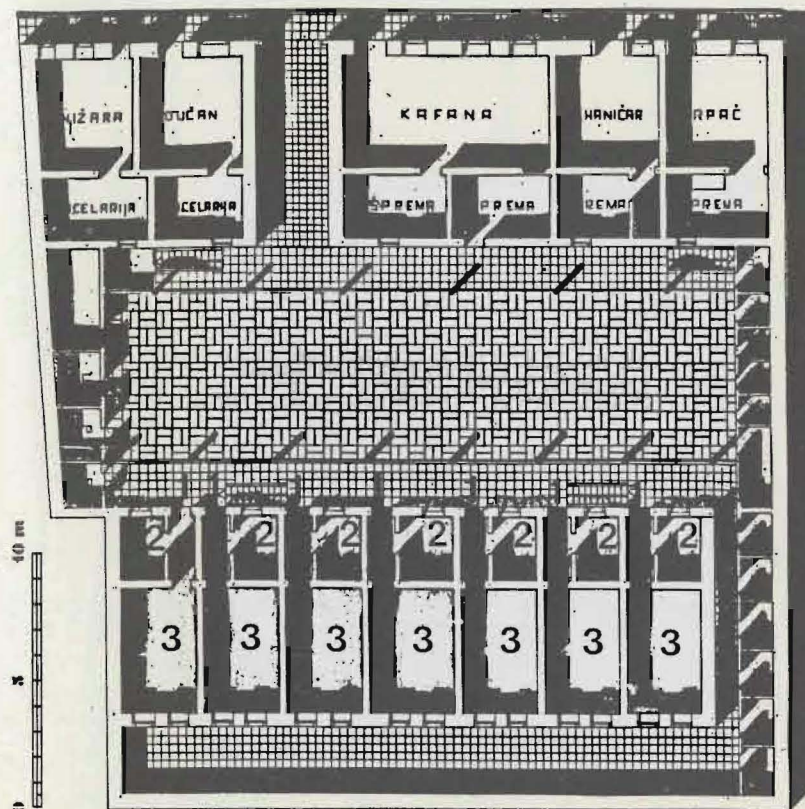
The house is entered on the ground floor near the knee formed by the two wings of the L shaped structure. In the courtyard we turn toward the stairs, go up to the divhana whence we turn toward the single apartments, placed on either side of our way. This again is a »3 D way« along which, we are accompanied by sound, color, light, and shade. During the siesta hours the tenants bring to the divhana magnificent rugs and cushions on which they relax while children play around them. The picture of such a collective life is basically different from that encountered in European apartment houses where people live one beside the other without knowing each other.

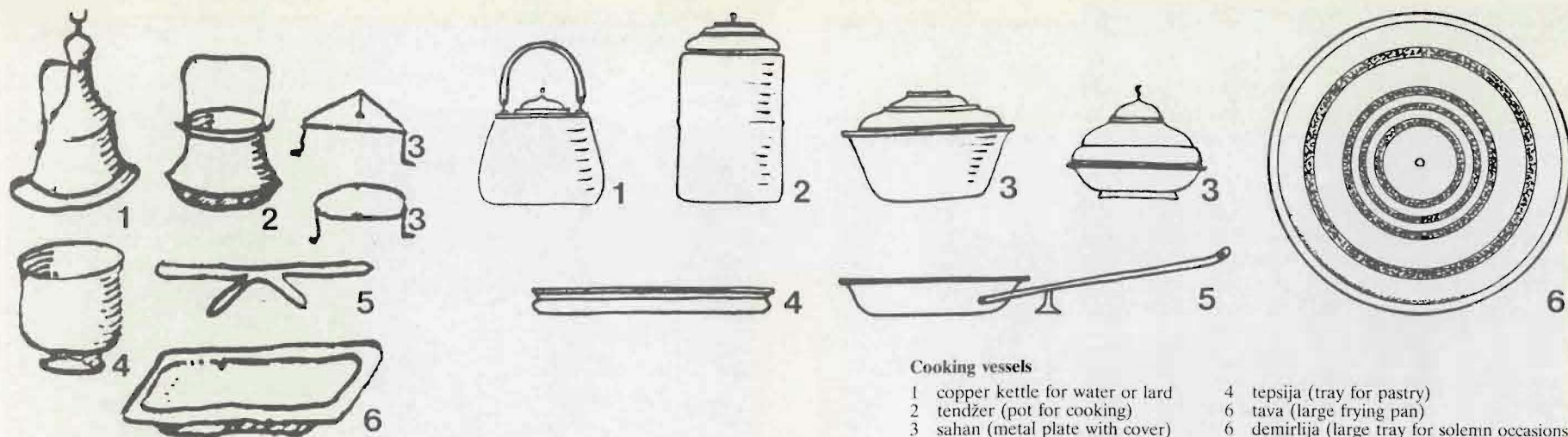
EUROPEANIZED BUILT-IN MULTI-FAMILY HOUSE

- 1 anteroom
- 2 kitchen
- 3 room



Ground plan





Tableware and Vessels

- | | |
|--------------------------------|-------------------------------------|
| 1 džugum (copper water pail) | 4 časa (bowl for milk or soup) |
| 2 copper kettle for cooking | 5 sinija (round small table) |
| 3 sadžak (tripod for roasting) | 6 načva (trough for kneading bread) |

Cooking vessels

- | | |
|-----------------------------------|---|
| 1 copper kettle for water or lard | 4 tepsija (tray for pastry) |
| 2 tendžer (pot for cooking) | 6 tava (large frying pan) |
| 3 sahan (metal plate with cover) | 6 demirlija (large tray for solemn occasions) |

II. FURNISHINGS AND UTENSILS

Let us consider first of all the tableware and the kitchen utensils.

Tableware and vessels

Tableware: Forks are unknown, knives used only for cutting bread or pies, spoons for liquid food. Solid food is carried into the mouth with fingers.

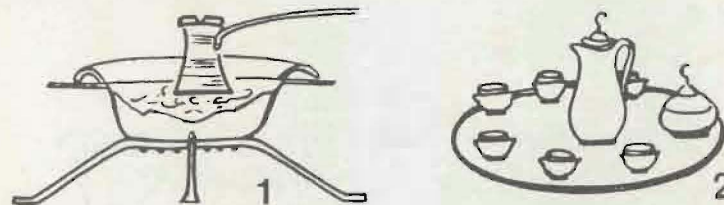
Vessels: Water is kept in the following vessels: the testiya (earthenware jug), the džugum (pail), the ibrik (copper jug), and the wash basin with a lid.

Coffee is made or served in the following vessels: djezva (coffee pot), ibrik (copper jug), fildjan (small china cup), tabak (tray). Further there are boxes for coffee and bread, sugar bowls, a coffee mill and mangala — a small brazier on which coffee is made, and a variety of other utensils such as: bakrach (copper kettle for water or lard), kazan (laundry kettle), tendžer (pot), sadjak (brazier), tepsija (tray on which sweets and farinaceous food are served), sohan (plat with a lid), demirlija (huge platter used on special occasions).



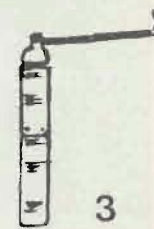
Water vessels

- 1 testiya — earthen jug
- 2 ibrik — cooper waterjug
- 3 ledžen — copper basin with lid



Coffee vessels

- 1 mangala — brazier (tripod small kettle with embers for warming hands or making coffee) and djezva — pot for making coffee
- 2 on tray, ibrik, small jug with lid for coffee, sugar-bowl and fildžans (china cups)
- 3 coffee grinder

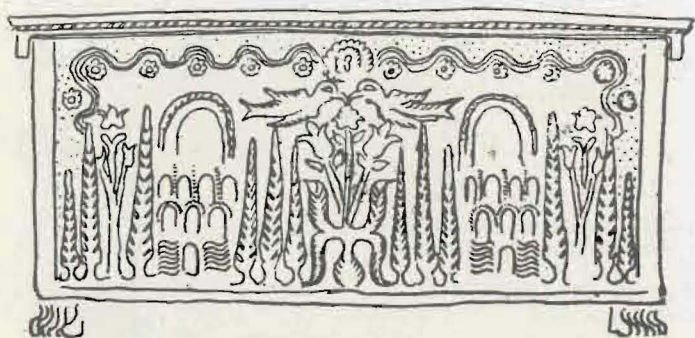




Kitchen with shelves at walls

All utensils, with the exception of the china fildjans, are made either of copper or tin. Glassware and the other articles referred to above, are kept on a shelf called tahta-posh mounted over the stairs.

The copper and tin vessels for water stand on a bench in the hayat. All the other utensils used over the fire stand either on a bench or a shelf (raf) in the kitchen.

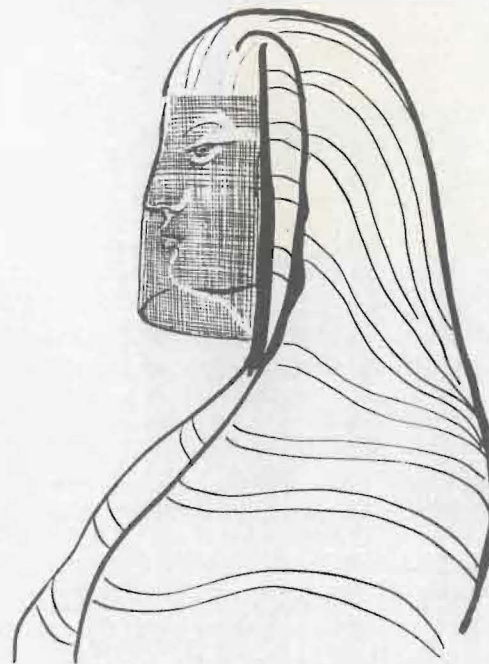


Sahara (chest for clothing)

Beside the shelf and the bench there are also a flour-chest and a wooden kneading trough in the kitchen.

Garments

Before we start discussing furniture we shall have to deal with the garments. An Oriental usually owns two to three suits — one for every day use, one best suit, and one summer suit. There are no clothes closets in the house. The garments are flung over a pole called serg, and covered with a blanket. Women own more dresses which are kept in chests (sehra) in the dressing room (sandukhana).



Married woman with veil and hooded overdress



Girl wearing dimije (wide women's trousers)



Low round table laid for dinner at Svrzin's house

Furniture

As has been pointed out above there are no clothes closets in an oriental house. There are, however, built-in cupboards in which innumerable small articles, trinkets and valuables are kept. Then there is the so-called dushekluuk, a chest for bed clothes, strawmats and mattresses which are by night spread out on the floor and used for sleeping.

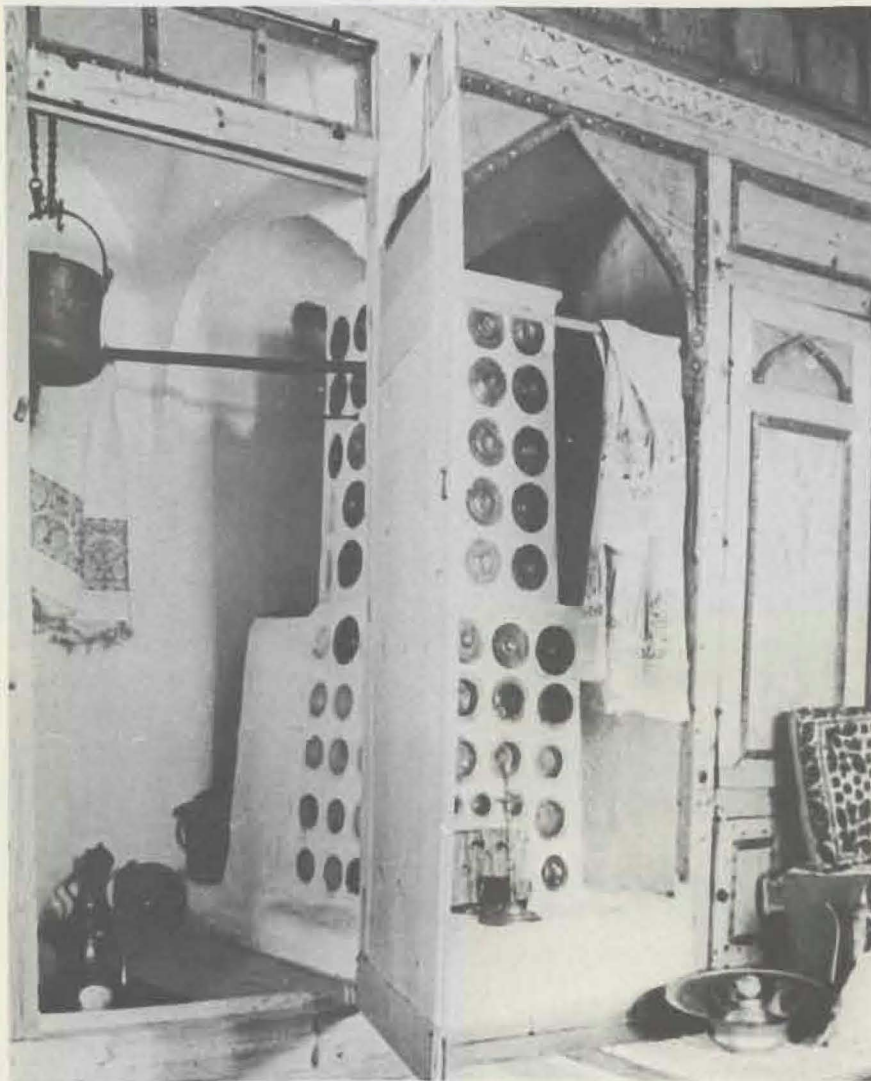
The siniya, or sofra, is a round wooden slab twenty centimeters in height, hanging in the kitchen or hayat and brought at meals to the room. There are neither regular tables nor chairs. The oriental squats either on the carpet or on the bench called sechiya, running below the window. Beside the musandra and the sechiya there is no furniture in the house and even these two are fixtures.

Thus it is easy to understand Le Corbusier when he tells of the Arabs of Algiers who moving each summer to their palmeries located two or three kilometers from the town, take with them nothing but a carpet and some kitchen utensils. The summer houses are completely and uniformly furnished and yet what variation of patterns.

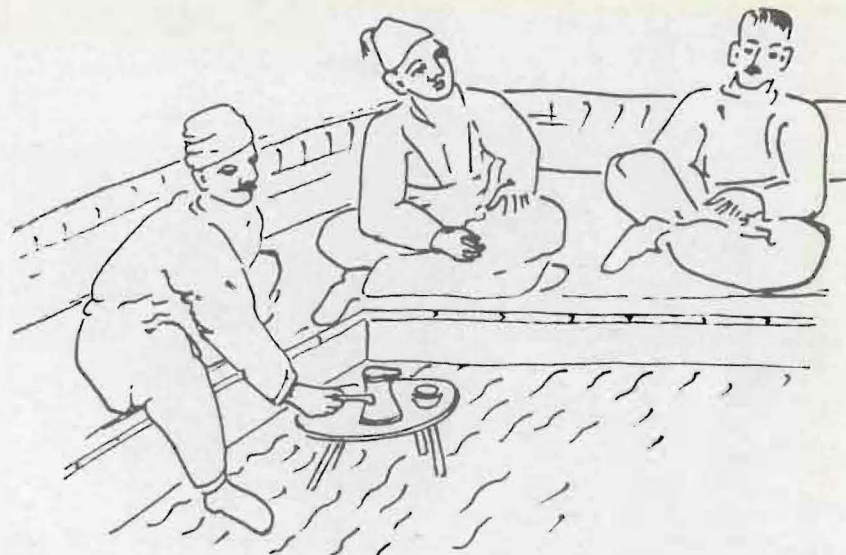


Entrance to room, sečiya (built-in bench with cushions) under window and mattress on the floor for sleeping at night





Musandra-partition wall with handshower and dušekluk-box for bedding, at Svrzin's house



Built-in bench with cushions (S. Didek)

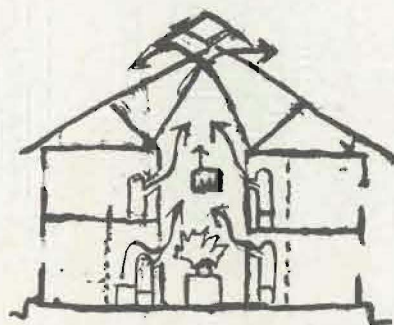
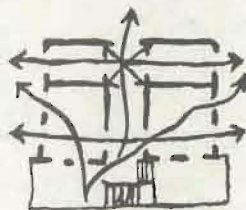
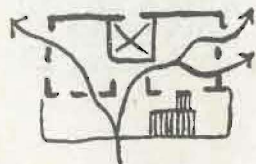
The Chair

Man's posture in various civilizations differs widely. The European, for example, working in the field bends his back low down to the ground while the Oriental performs the same work squatting on the ground. The European finds squatting uncomfortable while the Oriental insists that he can relax only in this posture. He holds that squatting stimulates blood circulation and says that this is the posture of the fetus in the mother's body.

On the other hand, posture has a great bearing upon the molding of space. The European, either sits or stands while the Oriental either squats or reclines in the room. For the European the house is a place where he works, for the Oriental a place where he relaxes and amuses himself. The European workroom is crammed with tables and desks while the Oriental is empty save for the rugs on the floor. The carpet on the floor of a European room is an absurdity because it is half hidden by the furniture and walked upon.

- The horizon of the European room is a little above the table that of the Oriental a little above the floor. In the latter the one or two pieces of furniture are placed against the wall — the benches against the window walls and the musandra against the entrance wall. Thus the oriental room is clean and empty. The oriental horizon being lower than the European, the rooms are lower, too: 2.10 m on the ground floor, 2.30 m on the first

XVI. VENTILATED HOUSE — VENTILATION



Winter kitchen with chimney

floor while the height of the door is 1.75 m. Consequently the rooms seem large and spacious.

III. SANITARY INSTALLATIONS

The oriental house is a masterpiece in regard to hygiene. In the following paragraphs we shall deal with those features of the house which greatly contribute to a healthy habitation.

The Airy House

The European places his house so that it gets as much sun as possible. The Oriental's first concern, however, is the view to be obtained from the house. In Sarajevo houses are found not only on the northern slopes looking southward but also on those looking northward into the valley of the Milyatska River. The houses situated on the eastern and western slopes likewise indicate that the primary concern of their builders was to obtain fine vistas.

It is true, however, that between the house and the view a divhana is often placed in an attempt to make the house airy and to protect it from heat.

The divhana is a kiosk before the house, it is a shady structure, a layer of air between the hot outer and cool inner spaces which gives rise to air circulation. The rooms behind the divhana are connected to it by windows and doors and open into the side façades so that ventilation around the corners is also possible.

The rooms placed in the middle of the house are ventilated horizontally through the hayat and the kitchen windows which are always open, and vertically through the hayat, kitchen, dimluk, and the opening in the roof.

Thus we can see that the oriental detached house is ventilated in all directions — it bathes in the air. It can be easily understood why in the European part of the town mortality from tuberculosis is ten times higher than in the houses situated in the old parts of the town.

The House Without a Chimney

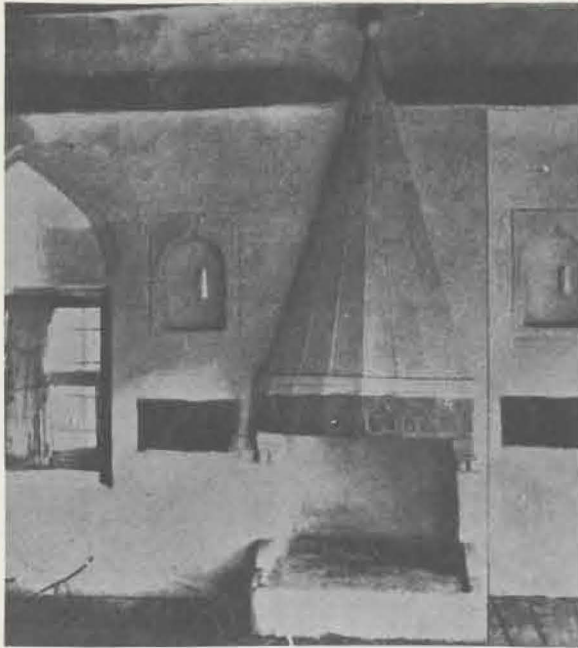
In the beginning the oriental house had no kitchen. In order to keep the house clear of heat, smoke, soot, and dirt the kitchen was placed in the courtyard under a triem. This was possible in the climate in which the house originated. But as soon as the house was transferred into a country with a severer climate, a winter kitchen was incorporated into the building. The summer kitchen, however, remained in the courtyard.

The winter kitchen is accessible from the hayat and the courtyard. It has no ceiling and opens directly into the garret whence smoke is carried off through an opening in the roof. This shaftlike space is nothing but a sooty chimney, and there is no wonder that every attempt was made to eliminate it from the house. Over the kitchen of a one-storied house a dimluk with a narrow gallery gradually developed. Here meat and fruit are cured. The dimluk is accessible by stairs leading directly from the kitchen so that in summer the living quarters on the first floor can be used and kept clean while cooking is done in the summer kitchen located in the courtyard. In winter the tenants gather around the hearth in the winter kitchen.

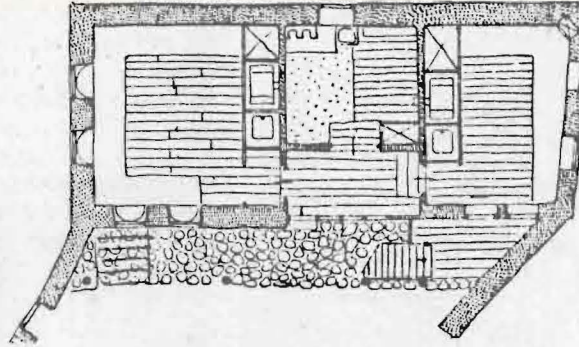
A second heating arrangement is the stove in the room close to the wash basin. The stove is stoked either from the room itself or from the dimluk by means of a movable grate by which heating can be regulated. Smoke is conveyed by a stove pipe to the dimluk. In this manner the room can be kept clean.

The third hearth is the kahvodjak on which coffee is prepared. This is a hearth covered with a funnel by which smoke is conveyed through a hole in the ceiling to the garret and out.

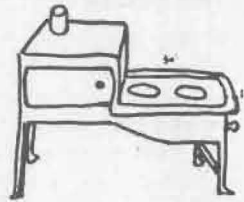
Sometimes there is a built-in flue which, however, already represents the first rudiments of the chimney. This flue is found especially often in Herzegovinian houses where it developed under the influence of the Mediterranean and Dalmatian fireplace.



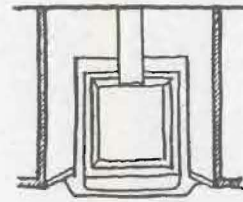
Kahvodzak — hearth for making coffee



Through the chimney above winter kitchen lead tubes from the room stoves, at the house, Hendina 9.



»Bosnian stove«



Foruna — clay stove in Hendina 9 Street

The kitchen, dimluk, and coffee hearth have been completely assimilated by the oriental house.

Cooking on a hearth is quite an expensive affair because most of the heat is sent up into the outer space. It goes without saying that the European range is much more economic. The builders of the oriental house could not ignore this fact. The range quickly found its place in the oriental houses, especially in those owned by people whose standard of living was low and who had no winter kitchens in their houses. They saw in the range a transportable device which in summer could be used outdoors and in winter put into the hayat which, consequently, could be used as an anteroom and kitchen combined. Smoke was carried off by a smoke pipe through the wall.

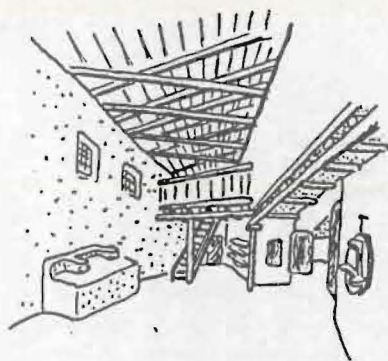
Thus the flexibility of the house was increased and the range became a permanent fixture of the Bosnian house. A poor feature of this device is that smoke is carried off through the wall. It is much better to convey it by a flue (14 by 14 cm) through the roof. The chimney permits the escape of smoke from the closed range thus making for a clean kitchen. The tenants, however, will still have to put up with dirty fuel and the vapors rising from the cooking food.

The introduction of a chimney made for clean cooking in each room which is an advantage in a climate such as that prevailing in Bosnia. But as soon as a chimney was incorporated into the Bosnian house, the building began to lose its typical features.

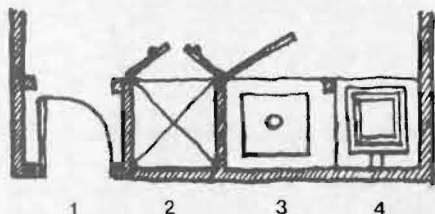
The original house then, had a hearth in the courtyard. In a severer climate the winter kitchen and the dimluk developed in the house.

The coffee hearth was placed over the kitchen hearth, and the more economic range and chimney brought about a definite transformation of the original house.

With the advent of the range the hearth was removed and coal used instead of firewood. The chimney made an end with the winter kitchen, the dimluk, and the partition wall in the room behind which the washbasin and bathtub were hidden. This was also the end of the separate summer and winter quarters and the beginning of buildings evolving in the vertical direction.



Two-story winter kitchen with chimney
at Svrzin' house



Interior wet unit — shower at the partition
wall

- 1 room door
- 2 box for bedding
- 3 shower
- 4 stove



Exterior wet unit

- 1 entrance gate
- 2 trough
- 3 lavatory
- 4 flirt-window
- 5 summer kitchen

The Inner Sanitary Battery

In the oriental house there are three water installations: the washtub in the kitchen, the washstand in the divhana, and the bathtubs in the rooms. We must remember, however, that not all oriental houses have a divhana and a winter kitchen. Consequently only a bathtub will be found in many houses. This bathtub is laid in the floor and provided with a water jug with which the bather pours water over his body. This then is a kind of hand shower bath.

The Oriental must wash after each act or work which is considered unclean.

The difference between the European bathroom and the oriental banyitsa lies in that the former is in the sphere of bedrooms while the latter

is found in each room. In Bosnia there is no room without a banyitsa and that not only in towns but also in the most out-of-the-way places. In the face of the very primitive sanitary conditions it is almost unconceivable that it was possible to give each single person his own bathtub.

The banyitsa is placed behind a partition wall together with the entrance door, stove, and a chest for bedclothes. There is also a kettle in which water is warmed up, and a box for firewood. The partition wall is usually near the entrance and close to the dimluk around which all these conveniences are arranged, similar to the modern mechanical sanitary core.

The Outer Sanitary Core

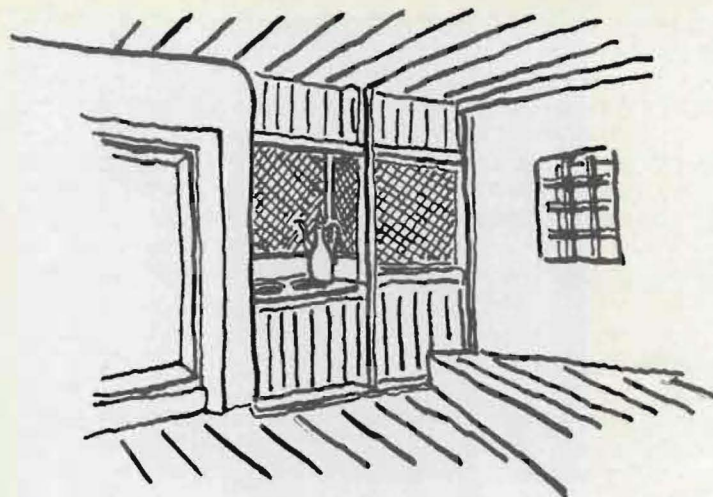
It is typical for the Orient that all wet, malodorous or unclean work is done outside the dwelling, under triems placed along courtyard walls. The structures consist of a woodshed, summer kitchen, privy, and a fountain. The location of these structures depends on whether there are drains and a water supply in the house or not.

If there is no drainage system the privy with the cesspool is placed in one corner of the yard. If there is water on the street side of the yard then the privy is on the same side and is scoured by the flush of water from the fountain. The privy and the fountain are on the street side of the yard while the entrance gate is placed between them. On the same side with the fountain are also the other summer kitchen offices.

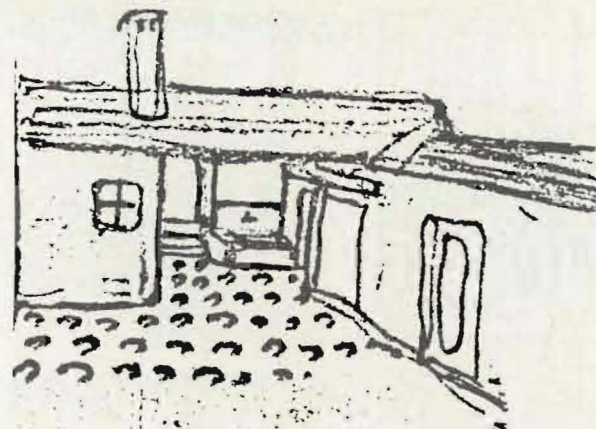
The fountain forms the core of the sanitary installations and is the center of the courtyard life in which it plays the same role as does the hearth in the life of Westerners.

The shape of the Bosnian fountain is more or less uniform: a stone cube with an outlet pipe over a stone trough. The fountain is the monument of the house but, if the houses have none, it will be found in the center of the settlement where it becomes the monument of the mahala.

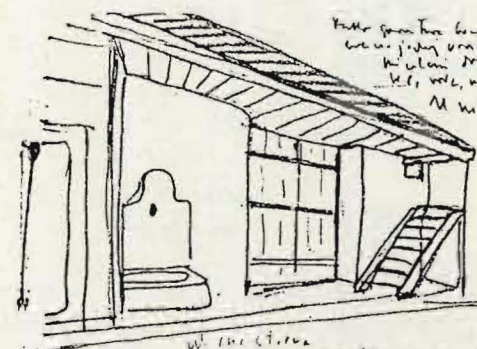
The privy is usually separated from the fountain by the entrance gate. It is a typical oriental fixture consisting of a wooden trough, foot rests, and a drain. In a recess in the wall is a jug with water for washing after defecation. Since for the Oriental squatting is a natural posture the privy has no seat.



Abdesthana — basin in verandah at Svrzin's house



Courtyard fountain



Porch fountain



Girl wearing wide trousers beside Mahala's fountain



Nanule — wooden slippers

IV. THE INFLUENCE OF WESTERN EUROPE

When Bosnia was occupied by the Austrians, capitalistic and colonial concepts propounded by them, began to show also in the architecture of the country. The feudal system began to rumble, the town of guilds decayed, the houses of artisans were shaken at their foundations while the houses of landowners gradually disappeared from the town.

The radically altered relationship between husband and wife eventually made an end with the separate men's and women's living quarters. The house introduced from a different climate made separate summer and winter quarters unnecessary.

Altered working conditions brought a table and a chair into the house. With the appearance of new appliances heating became more economic and the summer kitchen superfluous. The unclean utility rooms were transferred from the yard into the house. Instead of a primitive privy a W. C. was installed, instead of the fountain a water supply, and instead of the banyitsa a bathroom. The divhana was closed and remolded into a hall. The open spatial house was superseded by a closed cubiform structure.

With the advent of capitalism exploitation and land speculation set in. The individual family house was superseded by collective apartment houses, the detached house amid gardens by blocks in corridor like streets, the low collective house with a covered courtyard and a skylight by a closed tall building with a stuffy malodorous courtyard. The old patterns were feverishly adapted to new requirements.

It is difficult to say which factors — sanitary, climatic, economic, social, political — brought about this or that change. It will be easier to approach the problem the other way round — we shall first inquire into the changes themselves and eventually infer from them the causes that gave rise to them.

As has been already pointed out before the oriental house began to surrender — yet not unconditionally. It had so many unquestionably remarkable features which the new civilization could not boast of.

Regarding cleanliness what else did the oriental house lack but modern sanitary fittings? In every other respect it was a fit human habitation — it commanded a fine view, was properly ventilated, respected the neighboring structures, was intrinsically linked with nature, and had cheap sanitary instalations attainable by all, even the poorest.

When it already seemed that the Bosnian house was doomed, it was found that the new house which was to supersede it, was in many respects inferior to the old one.

Structural Alterations

A. B. Europeanization began with the transformation of the two-storied house with the summer and winter apartment into a two-family dwelling house. Thus the apartments came to lie one above the other and not one beside the other as in the original oriental two-familyhouse. This transformation was begun when the standard of living sank so low that separate summer and winter living quarters were considered a luxury.

C. A similar transformation had to undergo also the one-storied men's and women's houses when one, two or more families moved into them.

In such houses alterations can be carried out relatively simply by covering the winter kitchen and the dimluk with a ceiling. In this way two apartments with two kitchens are obtained. Each kitchen has its own range from which smoke is carried off by a pipe through the wall or by a regular chimney through the ceiling and the roof.

It is true that the ground floor apartment is massive and closed, and consequently poorly ventilated, while the first floor apartment containing the divhana is too airy and cold in winter. But when reconstruction is carried out, the divhana is fitted with windows, the walls are sheathed and plastered. The tenants insist that such an apartment with a wall the thickness of which is 18 cm, can be more readily heated and that it is much healthier than that located downtown with its 25 cm walls. The tenants of the ground floor, however, spend by far the greater part of the summer in the courtyard.

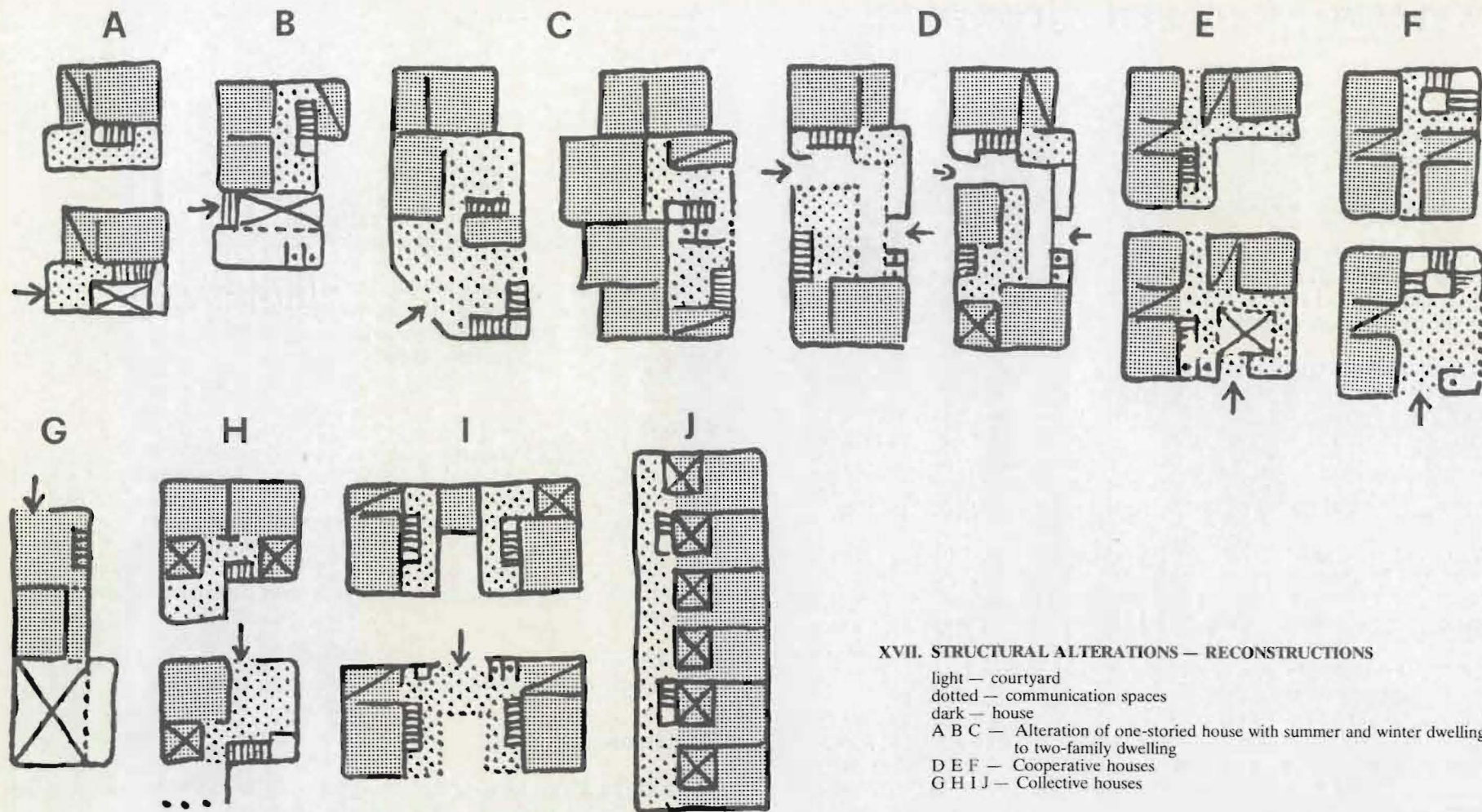
From the above we can see that the house is so flexible that it easily held its own against this first attempt of undermining its position.

Row Houses

While the buildings hitherto discussed were of the detached type arranged along spatially developed streets, the buildings dealt with in the following paragraphs represent already a transition to houses built in blocks.

This type of house is found in densely populated areas of the old part of the town; it is usually a tenement house the apartments of which are of the lowest order consisting of a hayat-halvat or halvat-hayat-halvat. It is consequently very similar to those houses which we have called collective and cooperative. The house is, as a rule, two-storied with apartments on the ground, as well as on the first floor. This solution was feasible only when a range and chimney were introduced into the hayat which consequently became a kitchen.

D. It seems that, originally, they were cooperative houses the first floors of which were connected by divhanas while the ground floors were connected by fences and the roots of the common conveniences.



XVII. STRUCTURAL ALTERATIONS — RECONSTRUCTIONS

- light — courtyard
- dotted — communication spaces
- dark — house
- A B C — Alteration of one-storied house with summer and winter dwellings to two-family dwelling
- D E F — Cooperative houses
- G H I J — Collective houses

E. The first floors of the houses follow meanderlike patterns while the roofs show that these houses were originally detached structures.

F. In more cramped surroundings the ground floors are shut off from the street by covered courtyards with the common conveniences; on the first floor is a common divhana. These houses represent the transition to row houses.

G. When the area is completely built up then the back rooms are ventilated and lighted through a small skylight which shows that, originally, the house was of the detached type.

The following buildings, however, are designed from the outset as row tenement houses under one roof with a wholly closed main façade overlooking the street. In these cases it depends on the width of the site whether the houses will be detached or collective houses with individual apartments.

H. If the width of the site does not exceed 5 m, an individual house develops. The conveniences are placed in the courtyard into which leads a narrow passage. The living quarters develop on the first floor. Sometimes the conveniences are found also in the yard behind the house. If the yard is large enough, then apartments of the lowest order develop in it.

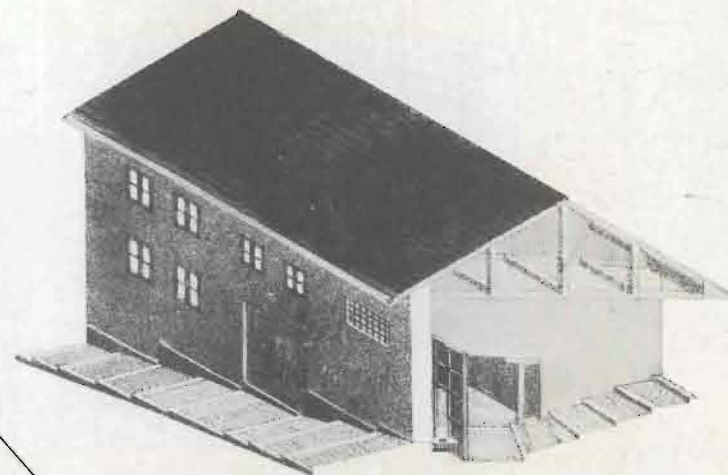
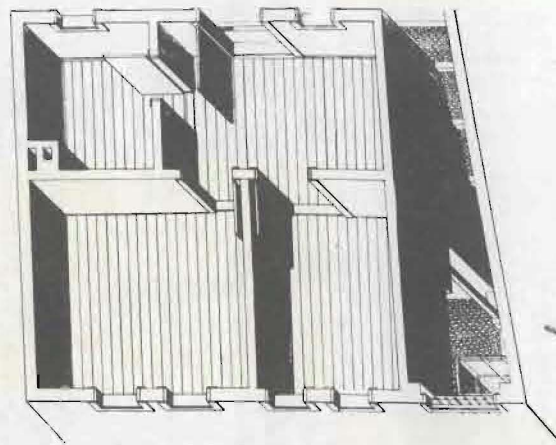
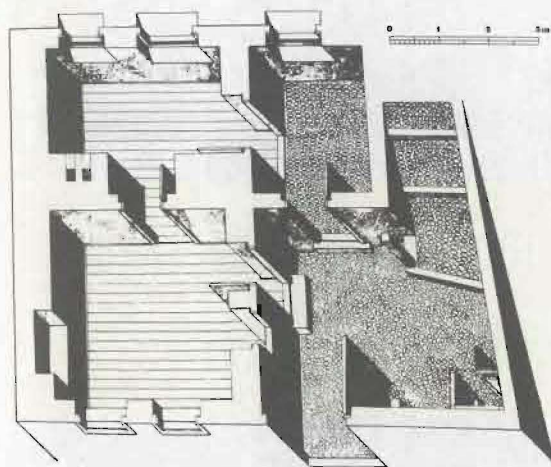
ONE-STORIED BUILT-IN ONE-FAMILY HOUSE WITH HALL — Alifakovac 9

Characteristics: acces on sloping land

First floor

Second floor

Axonometry



If the width of the site is considerable, then the following two kinds of collective houses with individual apartments will develop:

I. A collective house with separated divhanas on the first floor and the common conveniences in the covered courtyard.

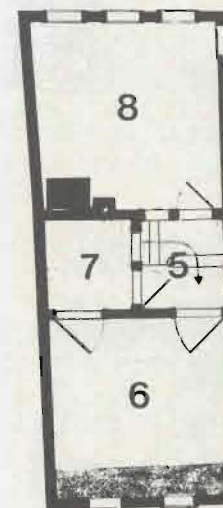
J. A house with a common divhana in the from of a corridor accessible by stairs. Along this corridor-like divhana on the first floor, apartments of the lowest order are arranged. On the ground floor various shops are usually accomodated while in the narrow backyard privies and woodsheds are placed.

Such a house has only one roof, is shut off on the street side, and opens through the corridor or the divhana into the backyard. Europe's contributions to this house are the range and the chimney. Modern sanitary fittings are unknown. The house is never more than two-story high. This is due either to the fact that available building materials would be inadequate for a higher structure or to the fact that the houses were built in conformity with traditional architectural concepts.

ONE-STORIED BUILT-IN MINIMAL ONE-FAMILY HOUSE (EUROPEANIZED) — Abdesthana 33

First floor

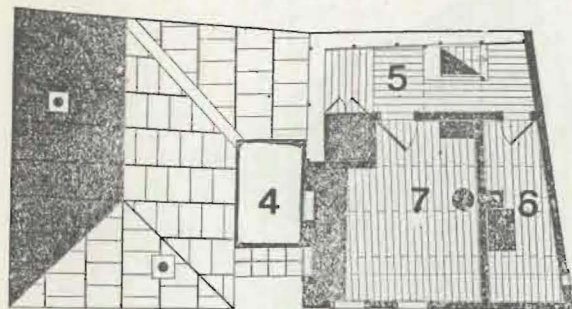
Second floor



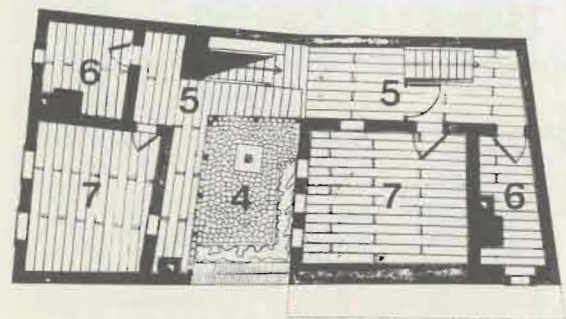
- 1 courtyard
- 2 lavatory
- 3 shed
- 4 laundry
- 5 anteroom
- 6 room
- 7 bath
- 8 kitchen

**TWO-STORIED THREE-FAMILY CORNER HOUSE (EUROPEANIZED) —
Adesthana 29**

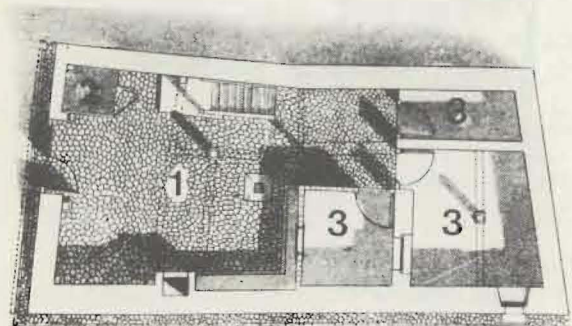
Third floor



Second floor



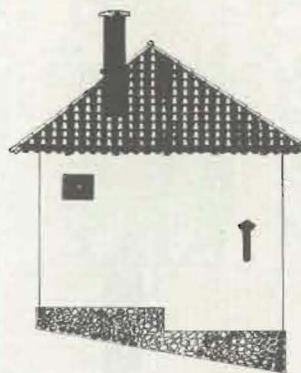
First floor



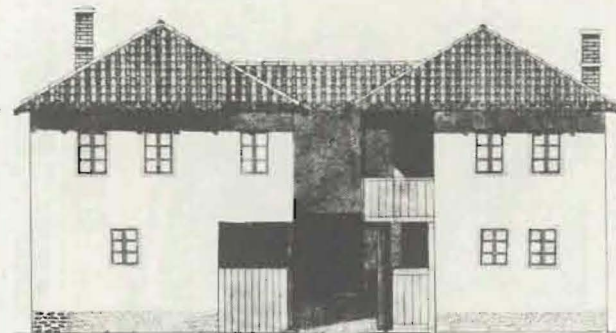
- 1 covered backyard
- 2 lavatory
- 3 shed
- 4 hypæthron
- 5 verandah with stairs
- 6 kitchen
- 7 room

**ONE-STORIED PAVILION MULTI-FAMILY EUROPEANIZED HOUSE —
Odobasina Street**

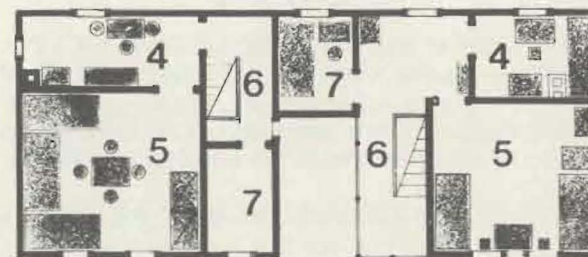
Side façade



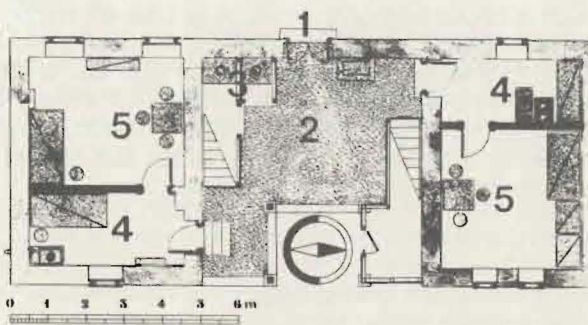
Façade — view from courtyard



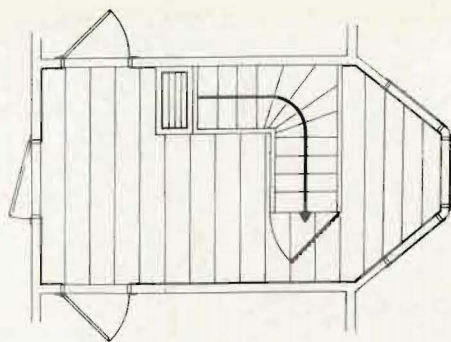
Second floor



First floor



- 1 entrance
- 2 courtyard
- 3 lavatory
- 4 kitchen
- 5 room
- 6 passage with stairs
- 7 bath



Hall, verandah
with raised part

XVIII. TRANSITION FORMS OF VERANDAH, A CONSEQUENCE OF HALL OR KITCHEN

light — courtyard
dotted — verandah and spaces developed from it
dark — rooms on first and second floor
— staircase

The Hall and The Staircase

Side by side with the Europeanization of the exterior features of the house went that of the divhana of the individual house.

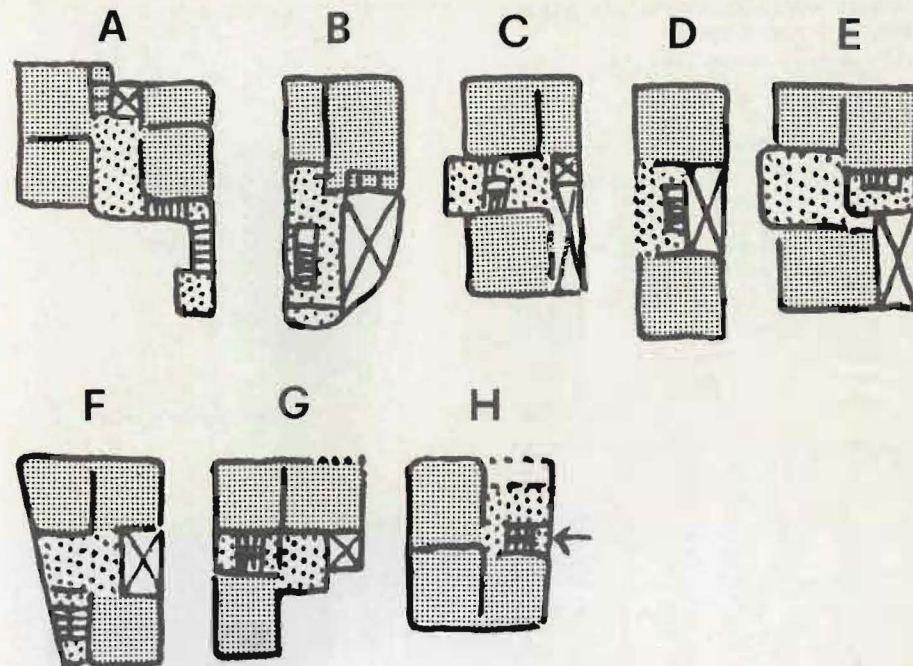
With the emancipation of the woman and the family the divhana lost much of its original character.

From the economic point of view the divhana is an expensive structure. It is true that the building costs themselves are not high, but it must not be forgotten that the divhana occupies almost one half of the house and is uninhabitable for at least six months.

Would it be desirable and reasonable to build it of more resistant materials? Certainly not! It would not be a divhana any longer.

The development, however, went in this direction. Gradually the divhana was enclosed by inner walls while the whole communication system of the house was altered.

A. The process began when the divhana was broken up into its elements: the kameriya which remained on the ground floor, the stairs separated from the divhana, and the independent divhana itself which can be closed.



B. Later the constituting elements were again incorporated into the divhana and closed.

D. The divhana is no longer placed in front of the house but in the middle of the building over the hayat or the covered courtyard.

C. Sometimes the divhana placed over the hayat, spreads into the depth of the building and is separated into a kameriya, the stairs, and the divhana itself, and lighted through the kameriya. This arrangement is already a step toward the hall.

Yet the room is still open on the side of the stairs leading to the hayat or the courtyard.

The climate prevailing in Bosnia not permitting two-story rooms without central heating, the divhana was again separated and closed.

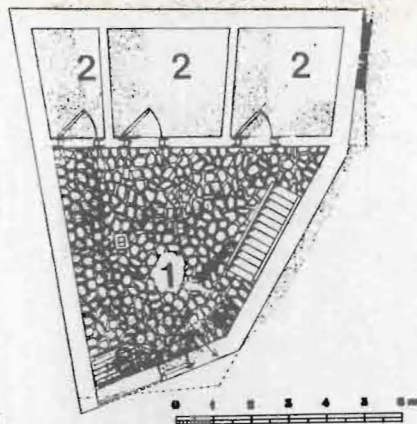
E. F. First the stairs were separated and enclosed in a staircase.

G. Then the kameriya was separated with a partition wall and transformed into a chardak of the individual house or into a kitchen of the collective house.

ONE-STORIED CORNER THREE-FAMILY HOUSE — Abdesthana 41

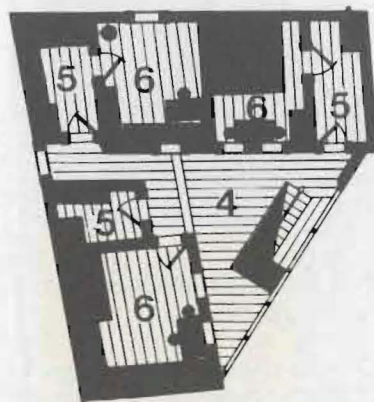
Characteristics: verandah — hall

- 1 courtyard
- 2 shed
- 3 lavatory
- 4 verandah
- 5 kitchen
- 6 room



First floor

Second floor

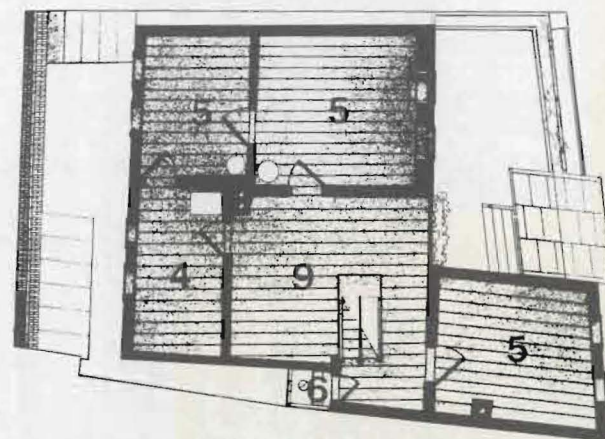


ONE-STORIED BUILT-IN TWO-FAMILY EUROPEANIZED HOUSE — H. Kapetana 6

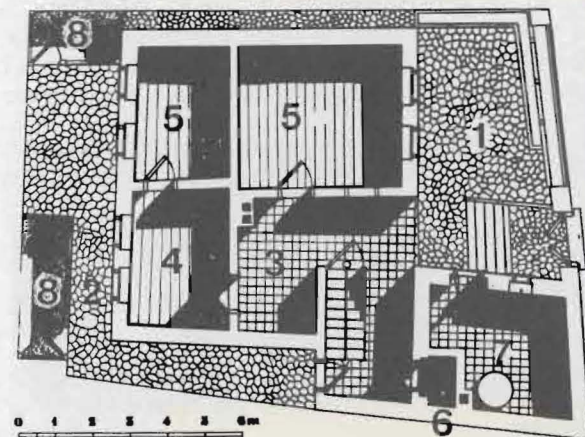
Characteristics: hall system

- 1,2 courtyard
- 3 anteroom
- 4 kitchen
- 5 room
- 6 lavatory
- 7 laundry
- 8 sheds
- 9 verandah

Second floor



First floor



Yet, while the divhana with the stairs and the kamariya represented a fine spatial formation, such a hall was much less attractive. When eventually a still grater reduction of rooms was dictated by economy, the hall became nothing but a passage or anteroom isolating single rooms of the apartment.

The open stairs also underwent a process of alteration. Single flight stairs were replaced by two flight ones and finally enclosed in a staircase which is an entirely unspatial formation prompted by economic considerations.

H. Originally two flight stairs were used on sloping sites. The landing was used as an entrance, one flight led down to the covered courtyard, the other one up to the dwellings.

During the further development the dwellings became isolated from each other by the staircase.

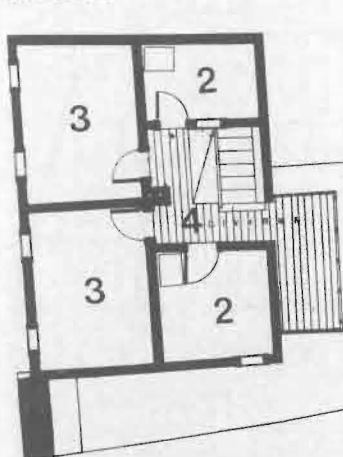
**ONE-STORIED ANNEX
THREE-FAMILY
EUROPEANIZED HOUSE
WITH SEPARATED UTILITY
BUILDINGS — Gorica 10**

- 1 courtyard
- 2 kitchen
- 3 room
- 4 verandah

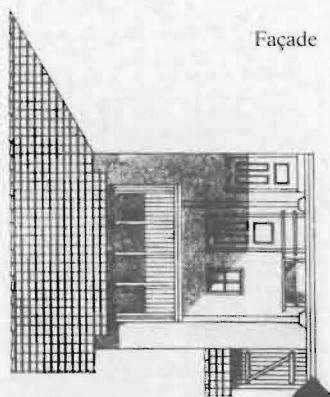
Cross section



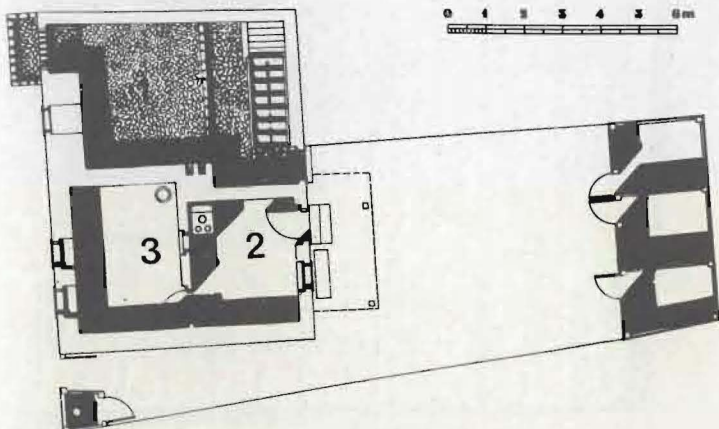
Second floor



Façade



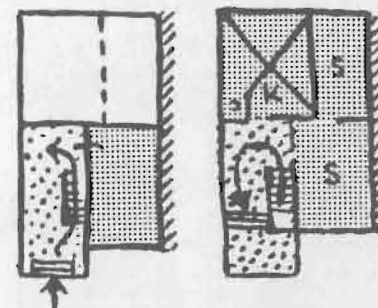
First floor



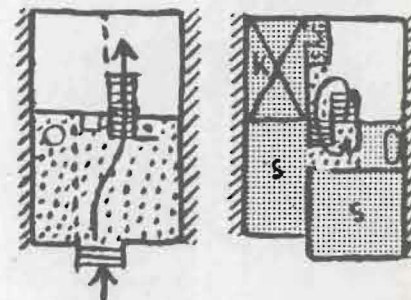
XIX. TRANSITION FORMS

- A House under Oaks
- B House at Medenica
- light — courtyard
- dotted — covered courtyard
- dark — house
- K — kitchen
- S — room

A



B



Transition Forms

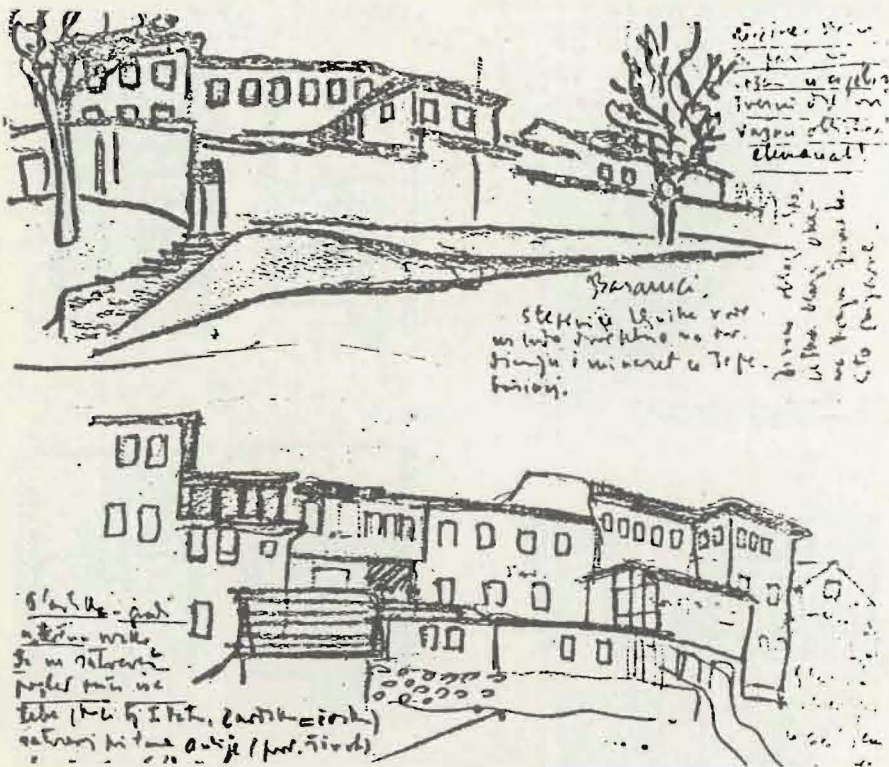
European architectural concepts did not show their influence only in the sphere of the communication system and divhana, but also in the organization of living rooms and utility rooms.

The hall which developed from the divhana began to shrink and eventually became nothing but a room with a number of doors and windows. Later even the windows were given up and lighting was obtained through the door so that the room became a passage connecting the other rooms.

The rooms themselves were no longer utilized for various purposes, but were differentiated into day and night rooms.

In Europe the room used in the day-time gradually developed into a living room which, if occupying the space of two stories, was provided with central heating and used for living and circulation. The living room is nothing but a western divhana.

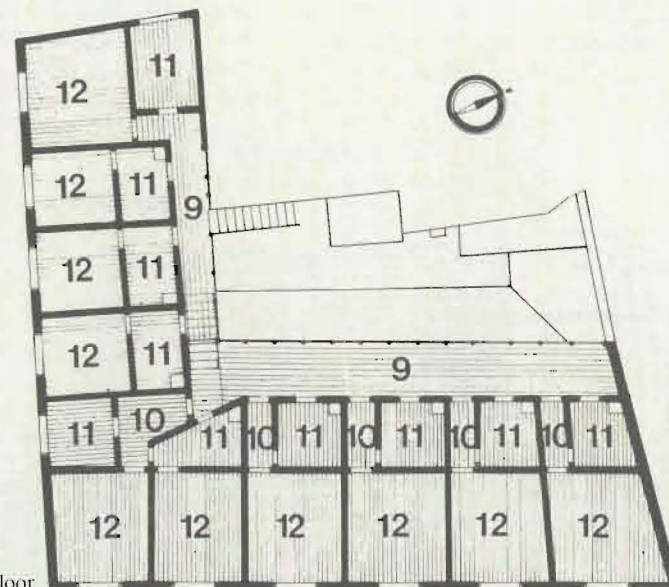
Modern sanitary principles induced many Orientals to install in their houses a W. C. instead of the original primitive privy, and to lay on a water supply instead of a fountain. Instead of a banyitsa in each room, a



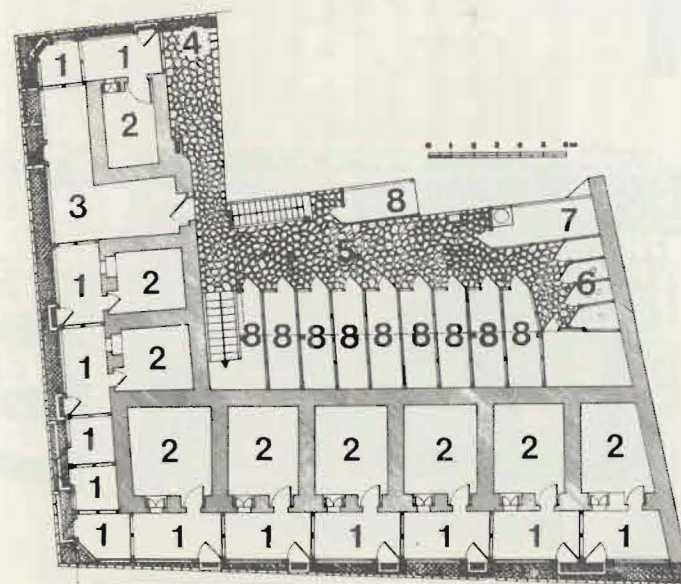
ONE-STORIED CORNER COLLECTIVE HOUSE WITH INDIVIDUAL DWELLINGS IN SECOND FLOOR AND WITH STORES ON FIRST FLOOR — OLD MERCHANT HOUSE — Telali 9, Bašcarsija

Second floor

- 1 stores
- 2 storehouses
- 3 café
- 4 entrance
- 5 courtyard
- 6 lavatory
- 7 laundry
- 8 sheds
- 9 verandah
- 10 anteroom
- 11 kitchen
- 12 room on upper floor



First floor



bathroom was placed near the bedroom. If these conveniences are found disposed around a core then they remind us of the dimluk.

All these foreign influences, however, blend with the traditional architectural concepts of the country. In the following paragraphs we shall consider two instances:

A. All the utilities are in the courtyard. On the ground floor are an anteroom, the stairs and a cellar. The first floor contains a divhana with a kamariya, a bedroom, and a kitchen with a shower bath (the house »Pod hrastovima«).

B. The L shaped house winds around a small cortyard. On the ground floor of the front wing are the utility rooms and the stairs leading to the courtyard. From the courtyard we come to the first floor in one wing of which are the conveniences and in the other the bedrooms with a bathroom (the house in Myedenitsa).

Here it is not difficult to tell the European form the oriental features: the lower part in the covered courtyard is oriental while the organization of the living quarters on the first floor is European.

V. METHODS OF CONSTRUCTION

Heterogeneous Materials

For centuries the ideal of European architects has been a homogeneous structure i. e. a structure built throughout of the same material. This was the ideal of the builders of the first wooden cabins and still is the ideal of such architects as, for example, Tony Garnier who in his structures of concrete, would have even the furniture made of the same material.

In this respect, however, the oriental house is different. Let us consider, for example, the most common structure occurring in the Orient — the one-family, two-storied house with summer and winter living quarters.

At the first glance we perceive its doubleness — the massive parts made of stone and the frail parts made of wood. A closer examination of the structure, however, will show that even the first floor is constructed of two materials: the wooden frame filled in with unburnt bricks and plastered.

Thus we have on the ground floor the masonry of solid closed winter living quarters, on the first floor the frame work of the summer quarters, and the airy kiosk on pillars. Different materials are utilized for different purposes.

The house is all but homogeneous, for it is, as we have seen, built of a number of materials. We can best compare it to American structures. The Americans were the first to give up the ideal of homogeneous structures.

Having rigorously analyzed the functions of the wall, they began to construct it of such materials which best meet the demands of its functions. Thus we have different screens against dampness, cold, heat, wind, sound, etc. Eventually they even transferred the function of load bearing from the wall to the steel skeleton so that the wall became nothing but a screen.

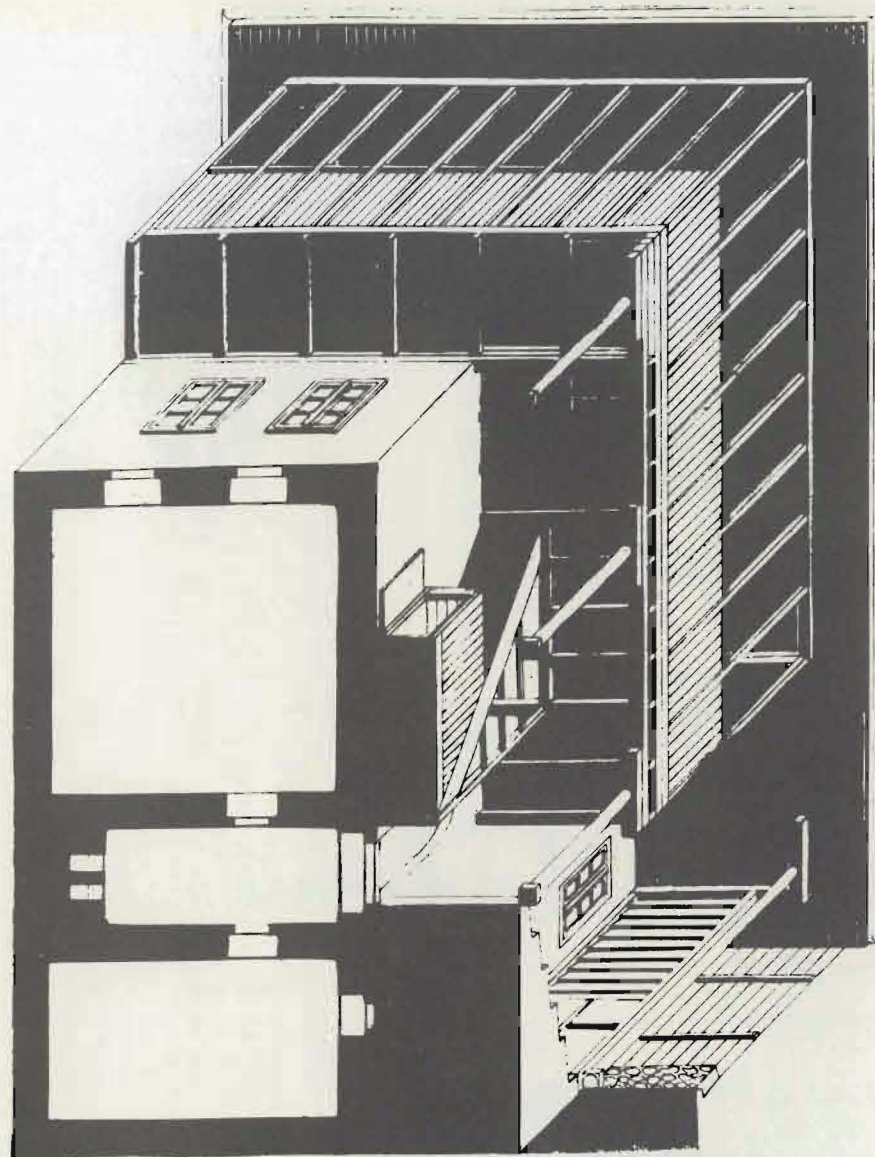
It must be pointed out, however, that there are differences between the American and oriental building methods. While the American wall is throughout of the same construction, the oriental wall shows a gradual transition from one to another material.

Foundations: stone and clay.

Groundfloor or winter living quarters: clay, unburnt brick, wooden ties.

Celling: a network of beams, furring, and clay packing.

First floor or summer living quarters: wooden frame, unburnt bricks, and clay.



Two kinds of construction:

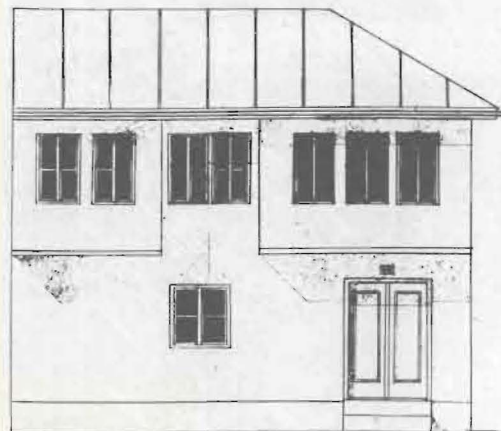
Massive first floor — winter dwelling

light wooden second floor — summer dwelling — Patke 12

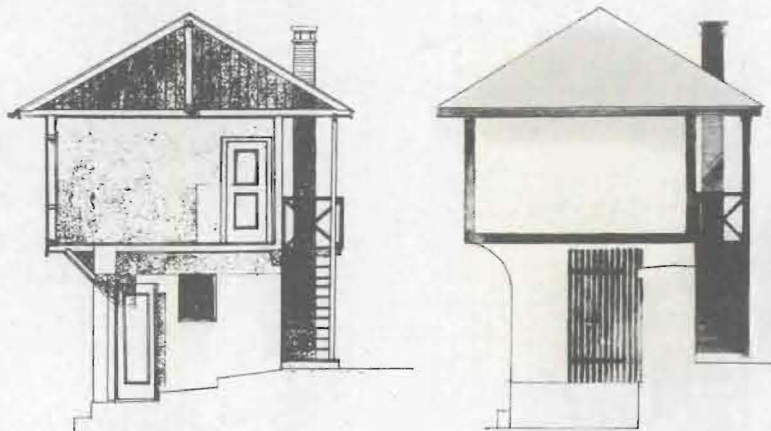
**ONE-STORIED ANNEX TWO-FAMILY EUROPEANIZED HOUSE —
H. Kapetana 19**

Characteristics: massive first floor light, wooden second floor

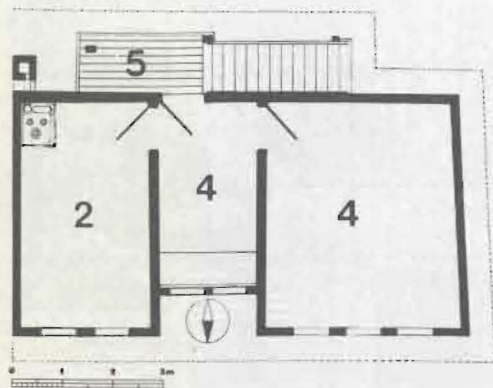
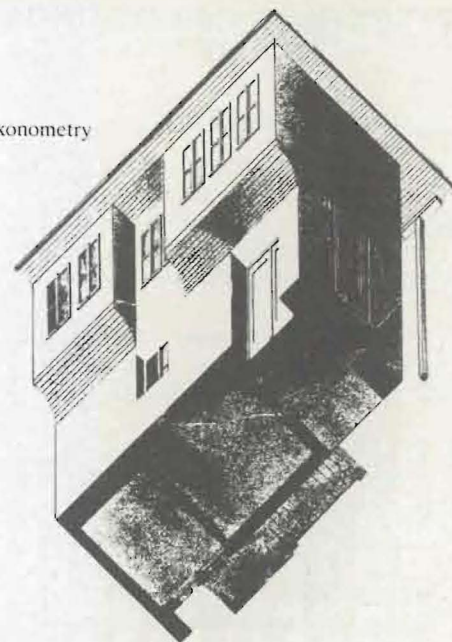
Façade



Cross section

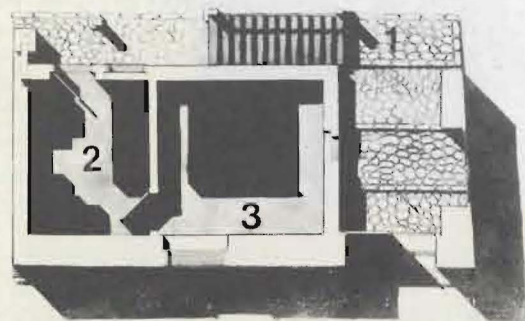


Axonometry



- 1 stairs
- 2 kitchen
- 3 room on ground floor
- 4 room on the upper floor
- 5 verandah

Second floor



First floor

Divhana and roof: wooden frame, furring and tiles.

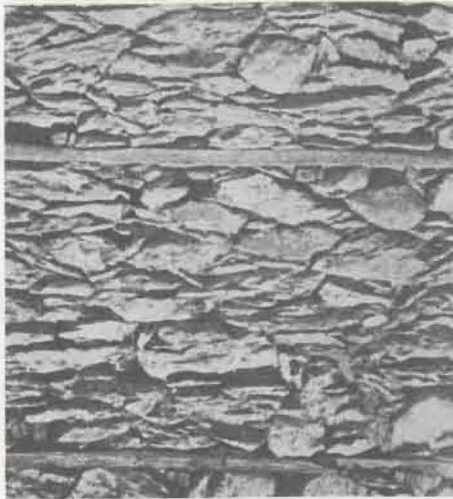
And while the American wall is designed on the basis of some abstract logic and built of artificial materials such as steel, glass, concrete, paper, etc., the oriental wall is a product of its habitat.

And while classic architecture expresses its ideas by stressing static functions and the supporting parts, the oriental architecture emphasizes the texture of materials and can consequently be called textural rather than tectonic architecture.

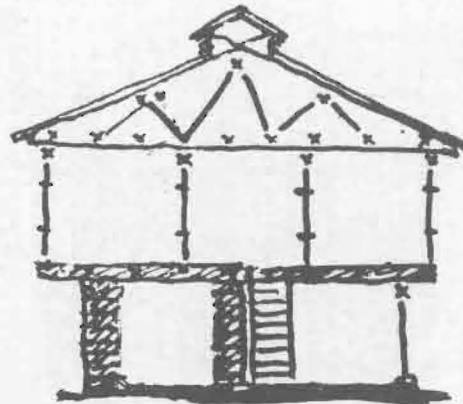
Origin of Methods

The oriental house boasts a wide range of building materials and methods adopted at different times and places.

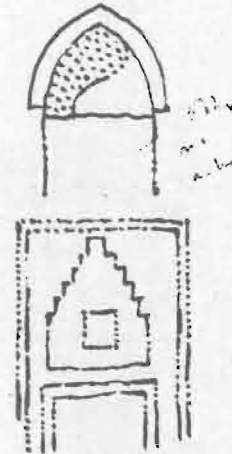
Let us begin with the foundation and the ground floor, for the house has no basement. The foundation consists of a quarry stone work 50 cm in thickness, bound with clay. This is an age-old method which originated in the scantily wooded parts of the world where limestone was burnt to lime. Lime is used only for plastering and never for binding the stones of the wall.



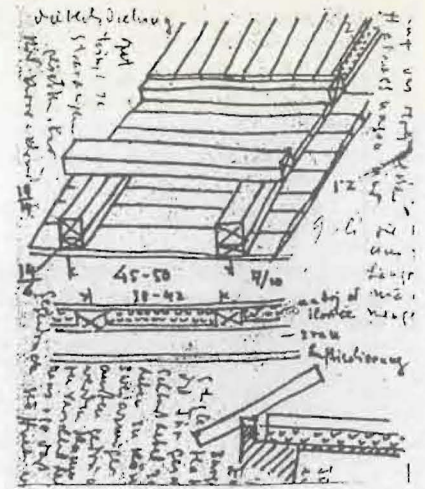
Hatule — wooden ties linking first floor walls



Cross section of the house — non-homogeneous construction



Pointed first floor window, similar to triangular niches above mosque entrance

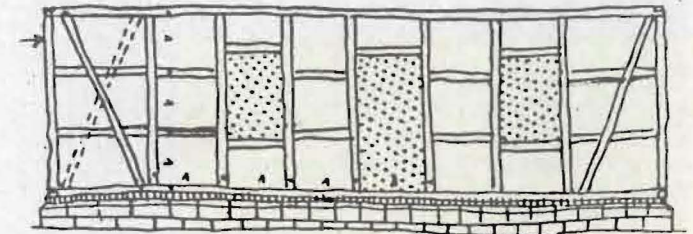


Load-carrying system with joists and floorings

The ground floor wall, 50 cm in thickness, is built of unburnt bricks made fast with clay. The brick called cherpich, is molded of clay and hardened in the sun. This, too, is an age-old procedure which originated in the arid parts of the world. The wall of unburnt bricks is bound with wooden ties, the so-called hatulas. These are slender beams placed on either face of the wall. The lowest two beams run at the height of the lower edge of the window opening, the next at the height of the upper edge, while the successive beams are placed one meter apart. The hatulas on the opposite faces of the wall are held together by short beams extending through the wall. To this wooden frame the window and door cases are fastened. This building method was utilized already in prehistoric times (Mycenae).

The ties above the windows are often relieved from their load by small pointed semi-domes built of bricks and molded with clay into pointed niches. The procedure is similar to that utilized in the construction of the step-like horizontally vaulted triangular niches over the entrance doors of mosques. The difference lies only in that here height does not permit further development. Such pseudovaults in the form of salient parts, are characteristic for the Oriental as well as the medieval architecture.

The ceilings of warehouses are made of beams covered with a layer, one meter in thickness, of clayey lime (atesht-en-emin = fireproof).



Birkatica — beam wall / bondruk

The ceiling over the ground floor consists of cross joists and flooring. The joists rest on the outer and middle walls around the dimluk. The result of this are the typical rotational jutties in the façade. The ceiling over that part of the ground floor which is not enclosed by walls, consists of parallel joists resting on girders which are supported by studs. The joists over the ground floor are floored and packed with clay, and usually without ceiling furring.

The wall of the first floor is the so-called birkatitsa consisting of frames, studs, girts, and braces nailed together without any definite plan, and filled in with unburnt bricks. The thickness of the wall is that of one brick. This is, perhaps, chosen in order to not overload the frail ground floor wall. This is more advanced and economic than the wall of logs and less systematic than the medieval frame work. It would seem that this building method originated in the Orient where it is necessary to economize with timber.

Similarly built is the divhana resting on posts. Its frame work, however, is not filled in with bricks but is only planked and provided with latticed windows. It is also shaped with greater care.

The ceiling over the first floor is similar to that over the ground floor. The plafond is wooden; there is no packing on the low garret.

The roof is made of plates, rafters and hips planked on the upper side. The structure is laid with tiles and resis on posts.

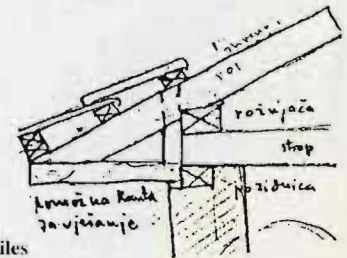
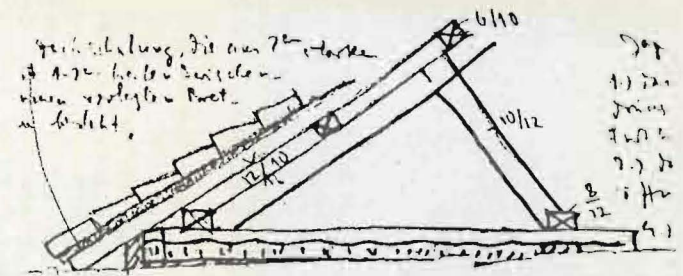
The only man-made materials used in the construction of a Bosnian house are lime and the tiles. Thus the house is a mosaic of natural building materials and methods of different origins and times brought into a harmonic whole. This brings us back to the first origins forgotten in Western Europe, but which might show us the way out of schematism.

Construction Principles

In order to develop a principle of construction the pattern of the one-family two-storied pavilion structure is no longer sufficient. It will be necessary to analyze also the row and the collective houses.

The construction of a one-family two-storied house with separate summer and winter living quarters is a relatively simple affair: wall resting on wall, room over room, and the summer living quarters nothing but a counterpart of the flat below.

A. The first difficulty arises when such a house is built in contact with another. Then one room of the winter living quarters must be sacrificed for the passage from the street to the courtyard. The apartment can be fully developed only on the first floor.



Roof structure, covered with roof tiles

B. If the ground plan of such a house is L shaped then the winter living quarters on the ground floor of the wing running parallel to the street, are transformed into a covered courtyard over which the living quarters of the first floor rest on beams and props.

C. In narrow row houses extending into the depth, the street side winter living quarters are replaced by a covered courtyard and a narrow passage leading to the backyard. Thus but little remains of the ground floor winter living quarters.

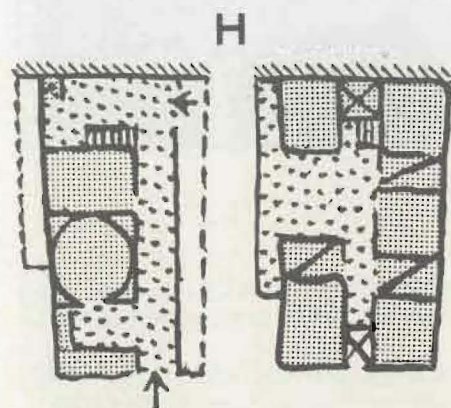
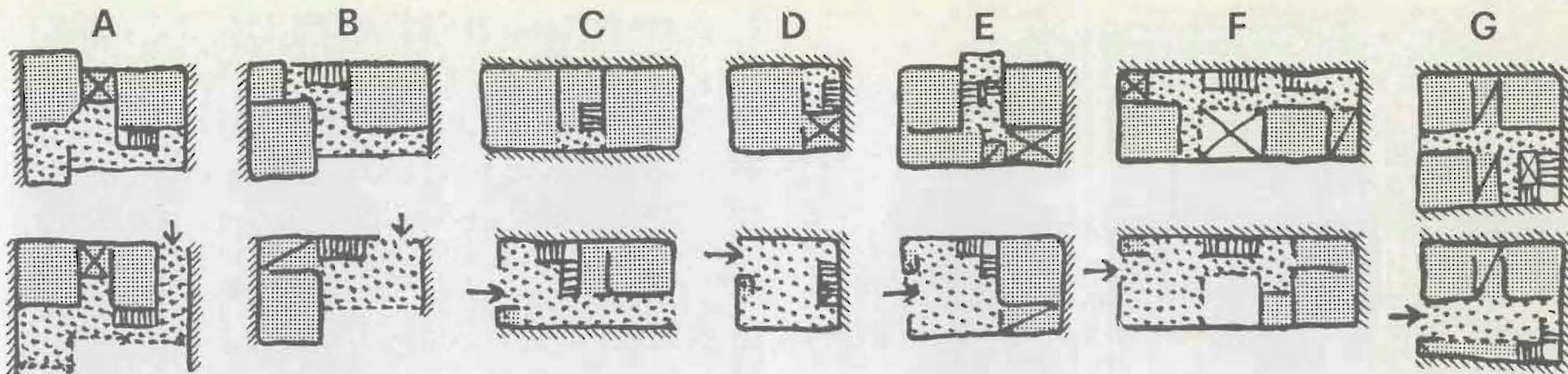
D. If the depth of the site is minimal then all the ground floor is taken up by the covered courtyard, and the living quarters can develop only on the first floor in which case they are used in winter, as well as in summer.

These covered courtyards often contain all the usual conveniences.

E. Detached houses also often show the same layout as those discussed under D. Yet such a covered courtyard is best thrown into relief in individual and collective row houses.

F. G. In small collective houses the space of one apartment is taken up by the covered courtyard.

H. More spacious collective houses rarely contain an apartment on the ground floor. Usually the street side of the ground floor is taken up by



XX. CONSTRUCTIONAL PRINCIPLE

Dotted — courtyard or covered
courtyard
— kitchen
— bakery oven
dark — house

stores while the rest of the ground floor is taken up by the covered courtyard in which the usual conveniences are placed.

The ground floor of a han consists entirely of props between which the walls of stables and storerooms are freely placed. These props, however, are not necessarily located directly under the partition walls of the first floor so that the arrangement of the rooms on the first floor is independent of the rooms on the ground floor.

In order to derive from the given examples a building method, we shall divide the construction of the oriental house into bearing slabs and supports. The bearing slabs are the ceilings over the ground and first floor, and the roof over the garret. They are made up of beams and joists, plates and rafters, plankings and plafonds, so that they form rigid slabs.

Supports are the walls on the ground floor, the frame walls on the first floor, and the props on the garret.

In such a structure the upper walls are not necessarily placed upon those below. The bearing slabs carry the load and transmit it to the nearest supports. It is easy enough to meander such a frame. The supports on the floors can be replaced by beams resting on props. If the ceilings are covered with a layer of fireproof clay then beams on props rather than walls carry the load. Thus the first floor can develop independently of the ground floor layout. The wooden bearing slabs together with the light frame permit the construction of jutties whereby the façade of the house can be freely molded.

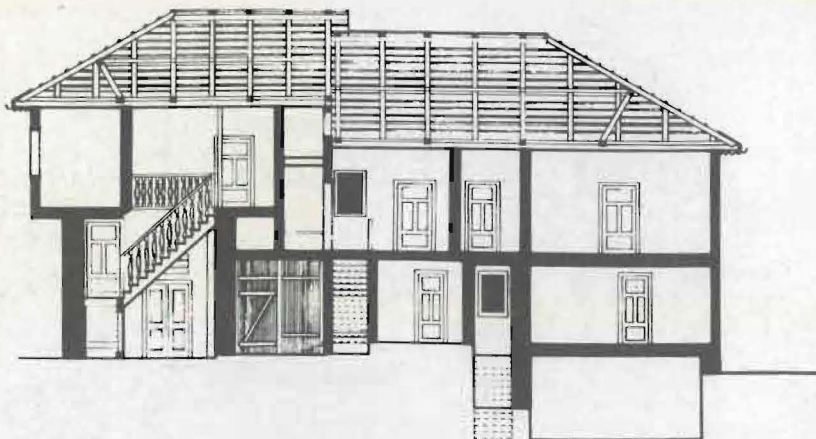
The building method discussed above bears a striking resemblance to that utilized in skeleton structures of reinforced concrete.

Facing

In the beginning human habitations were built of logs. This was mainly due to poor building methods and the primitive economic conditions.

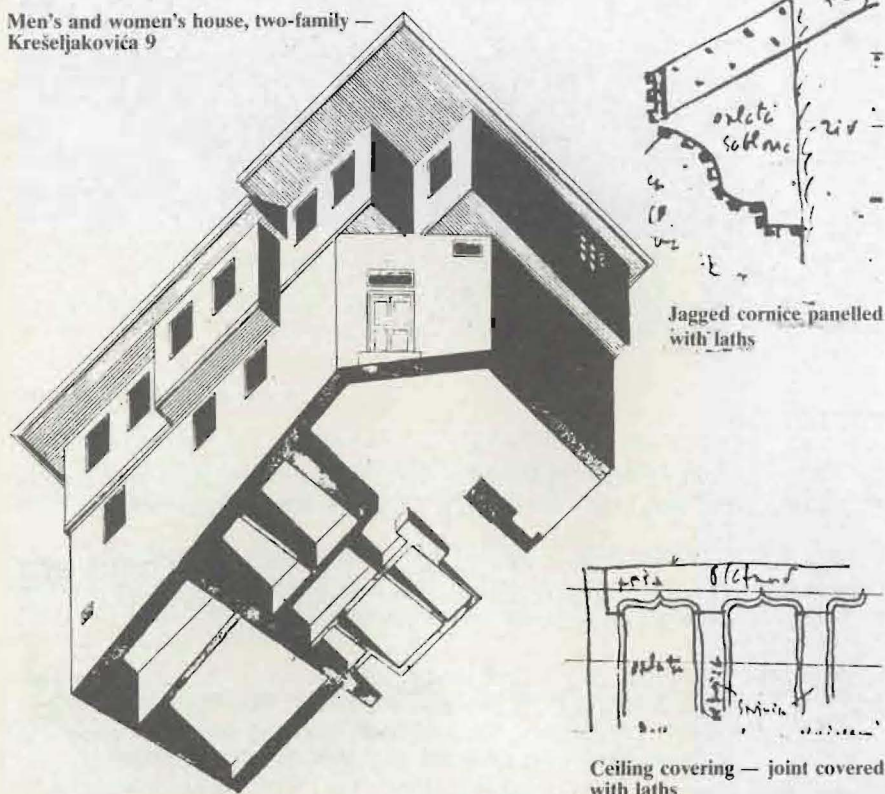
Later, we see that in the oriental house the walls and ceilings were constructed of frames and packings. This was the result of better building methods and more stable economic conditions.

It must be pointed out, here, that Gothic architecture, too, utilized similar building methods differing from the oriental only in that the Gothic builder laid emphasis, not only upon the plastered packing but also upon the wooden framework, while the Oriental planked the whole structure and used the framework only on the first floor over the massive ground floor.



Cross section of one-storied men's and women's house, in Krešeljakičeva 9

Men's and women's house, two-family — Krešeljakičeva 9



First floor on girders with trusses (Morich's Han)

We have been taught to see in a plastered wall massive masonry. If we want to the oriental house we must radically revise our concept of a wall.

We can see wooden frames of divhanas, planked and whitewashed, which at the first glance look as if they were solid stone or brick walls.

Then we have divhanas the façades of which are sheathed and plastered, and the rear sides of which are screenlike.

Further we find birkatitsas of summer dwellings which are not built of bricks but filled in with shavings, sheathed with laths, and plastered and on the other side, planked and unplastered. Such walls look like pure, two-dimensional abstract sharp-edged surfaces. It would be impossible to develop such parallelepipeds with masonry the bricks of which take up all space.

Ceilings over the ground and first floors, jutties, and eaves are similar.

The under side of a jutty is usually planked, the joints nailed with laths and the sides provided with jagged friezes. Sometimes we find nailed to the girts of the unleveled cornices, two or three laths which form the ground work for the horizontal planking and the vertical jagged eaves.

Further, molds in the form of stone profiles are nailed to the end of rafters, lined with laths and plastered.

All the different methods referred to above are utilized with a view to hide the construction by means of planking.

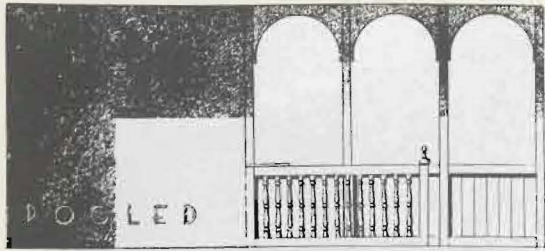
We, for example, would mold the front end of rafters and joists and show them, or we would mold the stone wall and compose cornices of overhanging bricks.

Here we have to do with two methods one of which encloses the structure with geometrical forms while the other molds it; the difference between the two is due mainly to building materials.

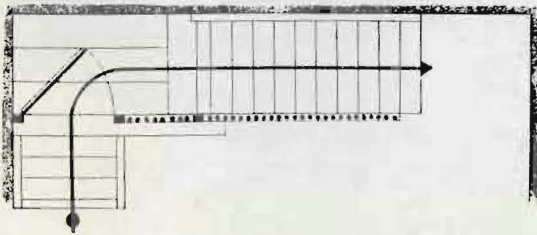
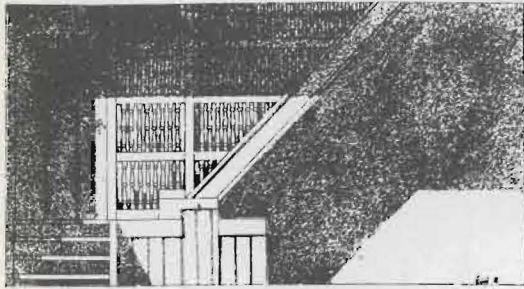
Oriental architecture has often been criticized for not having developed its own building system, for having taken over alien building methods, and for laying stress on form rather than construction. Yet it seems that various modern frame structures faced with all kinds of materials will make us again conscious of the value of oriental methods.



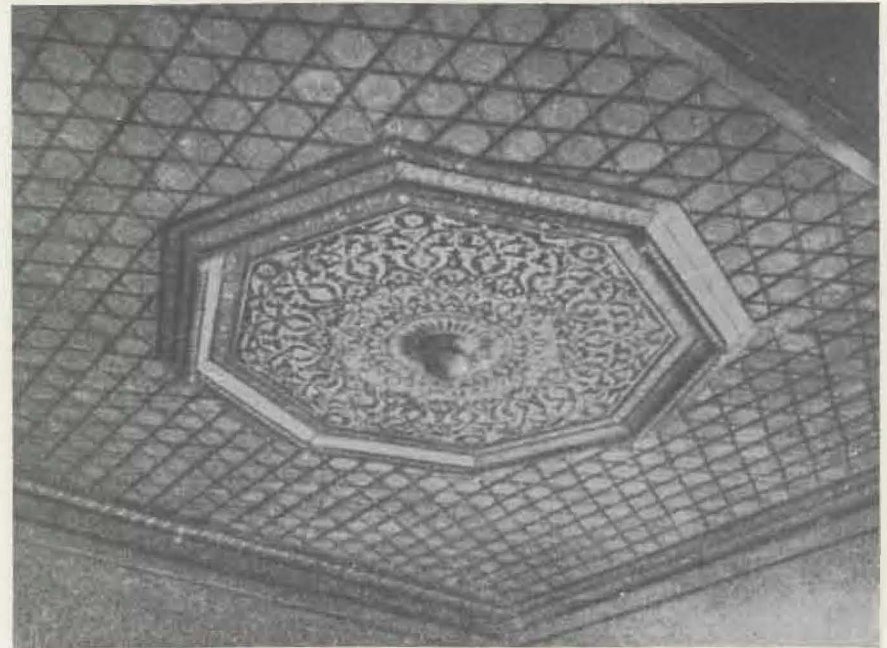
Structure of the house from ground to roof tiles



House, cross section — stairs with balusters



Stairs in the house in Hendina 9



Šise — wooden carved ceiling in Halibašića Street

Joinery

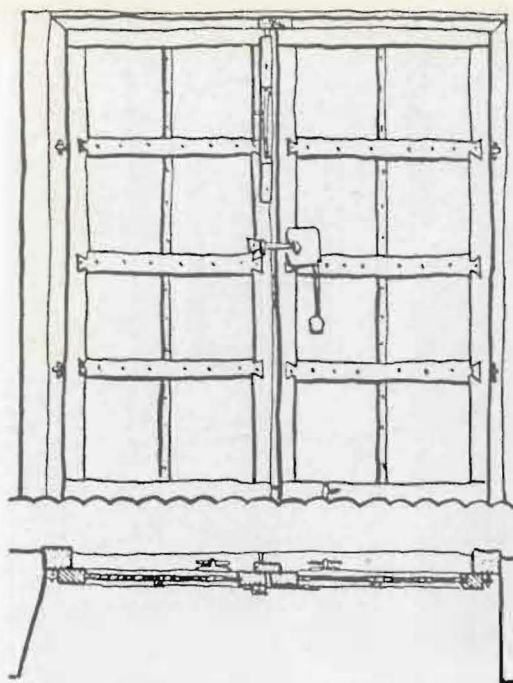
The most outstanding feature of an oriental structure lies, as we have seen, in its wooden constituents which either carry the load (frames, beams) or sheath the structure (planking) or cover the joints (laths) or are used for decoration (frieze).

The stairs are light and similar to those on ships. They are usually steeper and wider than ours. The elements of which the stairs are made up are: strings, steps, and railings.

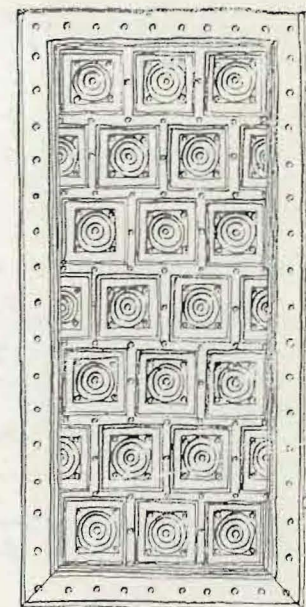
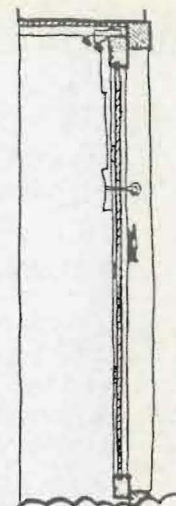
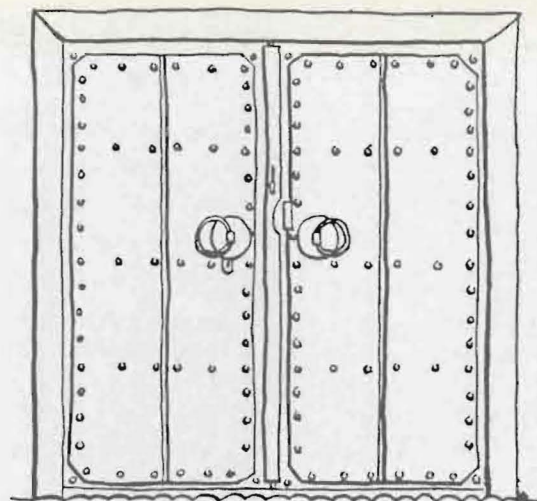
The strings resting on the floor and the ceiling have notches on which the treads and risers are nailed. Where the riser and tread come together, a narrow lath is nailed. There are no complicated joints or pins — everything is just nailed together.

The lower triangle between the floor and the string is plastered, the upper enclosed by the railings running to the first floor. On the first floor there is sometimes a trap door which when open leans against the wall.

Ceilings: planked joists, laths, and friezes. Beside the laths covering the joints there are sometimes also such with a purely decorative function forming with the former geometrical patterns. The ceilings of living rooms



Entrance gate of the house in Hendina 9



Interior door in the house in Hendina 9

or those of men's chardaks are often decorated with a large rosette of carved wood.

Gates are wide and doubleleafed so that a pack animal can easily pass through them. They are almost square and consist of a frame, planks, laths, and friezes.

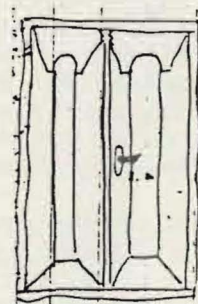
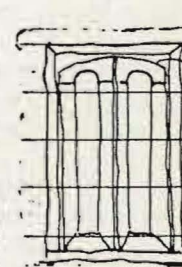
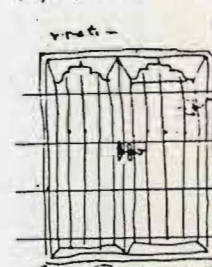
Smaller gates have instead of a regular frame only two or three beams nailed together.

Over the planking two or three more planks are nailed crosswise. The joints are covered with friezes or laths. The upper and the lower edge of friezes is often carved.

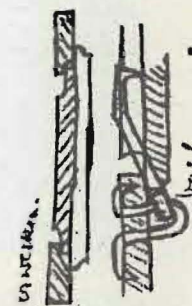
From the street the gates look as if they were paneled while from the court they show that they are only nailed together. There is also a clever wooden device which automatically closes the gate.

Windows or pendjers: On the ground floor there are only few low window openings while on the first floor they are more numerous and higher and sometimes continuous. They consist of glassed sashes. Here we can already notice a number of different joints between the frames and panes. The profiles of wood are somewhat wider and thinner than

Голубая.



Lath for blocking door



Gates with carved friezes

ours and very light. There are usually no double windows. The windows are on the outer face of the wall. In some cases, however, when they are provided with a lattice.

They can be opened by turning the sashes around a vertical axis or by sliding the lower movable half up along the upper fixed half. The lower half is used for ventilation while both halves together provide lighting and views.

Such a window is flexible and light like a film holder of a camera.

Oriental wooden structures are very simple: two layers of wood placed crosswise and nailed together. More advanced are Gothic wooden structures in which frames and panels are used without nailing. Thus the oriental wooden structure lies between the Romance nailed and Gothic planeled construction; it is lighter than the Romance and more primitive than the Gothic.

In modern structures again attempts are being made to utilize crosswise placed layers of wood which, however, are no longer nailed but glued together.

CONCLUSION

This architecture has often been criticized for having freely appropriated the experiences, principles and methods of others and eventually reduced them to a few simple patterns. This procedure has often been called practicism. But, after all, who does not appropriate ideas and adapt them to his own requirements? It must be pointed out, however, that nowhere else such freedom of adoption and skill to bring the various procedures into an organic whole, are found as here.

The massive brickwork — the cherpich made fast with clay and wooden ties and plastered. The niches over the windows — salient parts of cherpich molded with plaster. The birkatitsa — a wooden frame filled in with cherpich and shavings — planked frames of beams and clay packing. The roof is similar and covered with burned clay.

In spite of the wide range of different building materials everything is reduced to the same building method — framing:

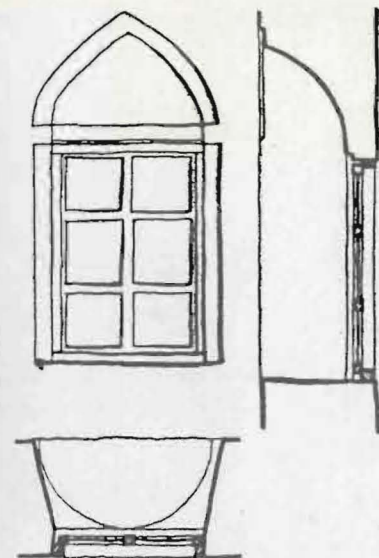
birkatitsa: filled and plastered frames;

roof: planked and covered frames;

cornices: planked and molded frames;

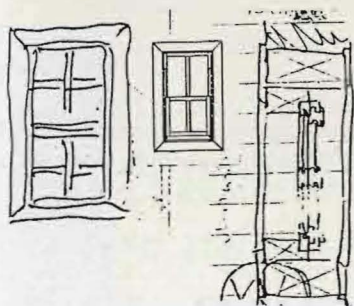
stairs: frames with planking which carries load;

gates: planked frames lined with laths and decorated with friezes.

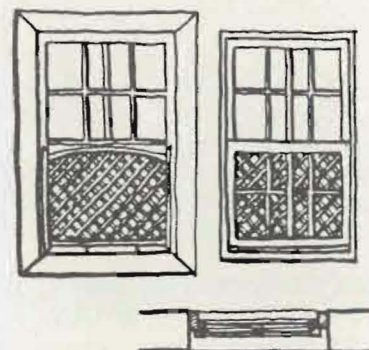


Window on first floor below niche lintel

Sashwindow



Window frames

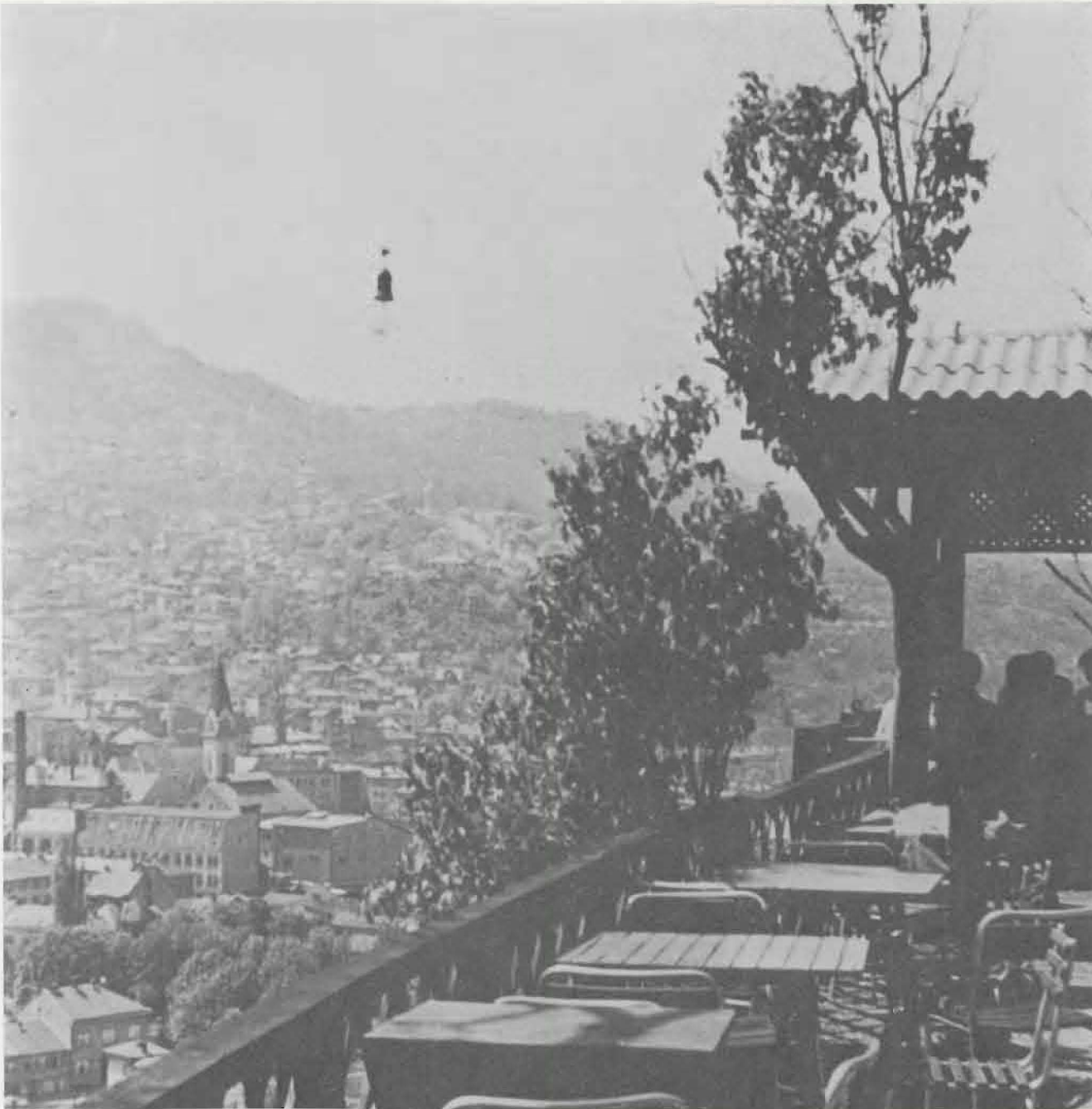


Window on upper floor with mušebak — wooden lattice in Hendina 9

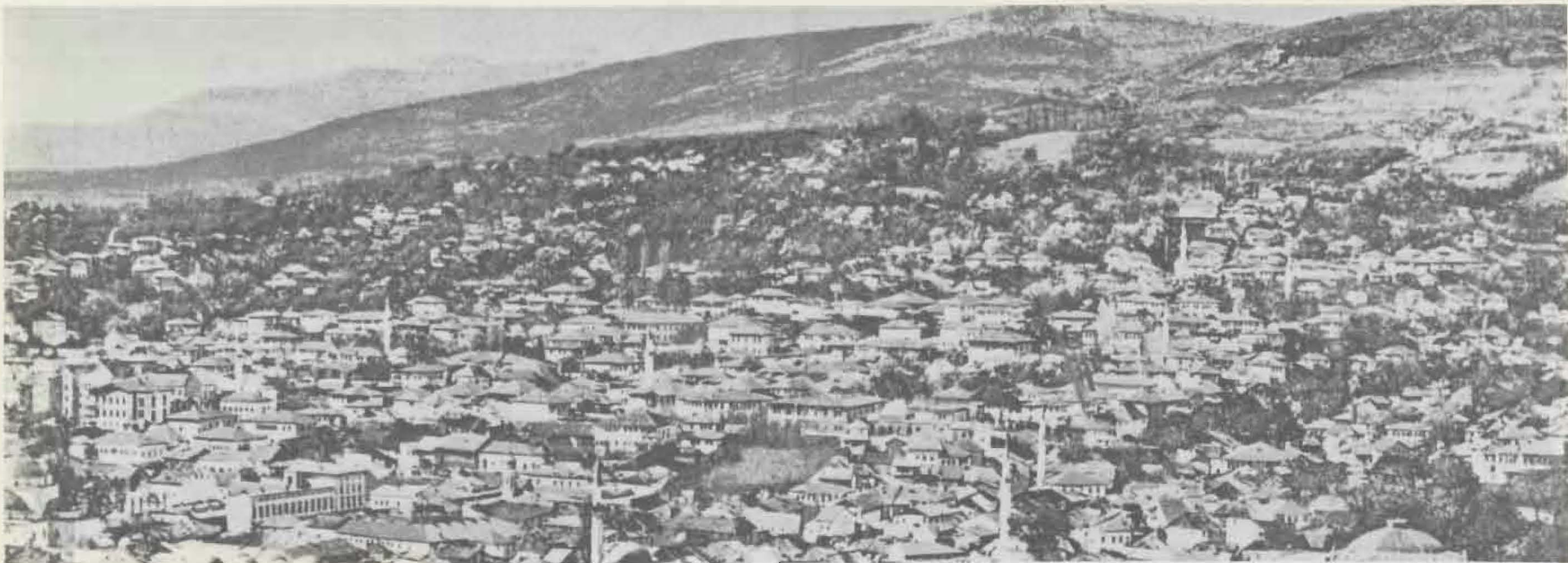
We see that the outstanding feature of this architecture is its wooden construction and this in spite of the fact that wood is very economically used. Of wood are made only the frames which are then filled in with clay. We must ask ourselves why this economizing with wood in a country so rich in forests.

There is no wonder that the builders of these houses are carpenters. Only by utilizing the building methods referred to above a carpenter unaided by any other artisan, could build the house.

UNWRITTEN LAWS



Upper terrace of the Jekovac Café with a view of the town



A panoramic view of Sarajevo

UNWRITTEN LAWS

ARCHITECTURE ON THE HUMAN SCALE

In the following paragraphs an attempt is made to throw light upon the relationship existing between man and architecture.

Scanning Sarajevo from Trebevitc we can discern two formations: the feudal — oriental, and the capitalistic — European town.

The oriental town is made up of lovely houses surrounded by gardens. The structures are low, horizontal, unpretentious, placed in layers all over the adjacent slopes. Here and there a minaret or poplar breaks the pattern. The view is marvelously harmonious, calm, and comprehensive — the very image of an old civilization.

Beside this oriental town the other built during the times of capitalism, is listic era. Its pattern is chaotic, fragmentary, planless, and out of proportion.

In Sarajevo we can find beside the Western conveniences also the charm of the Orient. What are these conveniences and what is this charm?

Modern sanitary science has, no doubt, greatly contributed to health by rendering the dwelling a fit habitation for the occupant. In spite of the fact that the charshiya is an unhealthy, blighted area, that many districts are breeding places of tuberculosis, it possesses so many attractive features, so many architectural masterpieces that one must pause to admire them.

Beside this Oriental town the other built during the times of capitalism, is nothing but a distorted copy of what we find all over Europe: a town of comfort, profitseekers, narrow streets, and slums — a town without plan or proportion.

In the suburbs of this town, however, the proletariat built their unpretentious houses on sites commanding fine views, placed amid gardens, and in proportion to man and nature. This is a sign that the sense of space and harmony was still kept alive in the hearts of the builders. We shall endeavor to unriddle the secret of these buildings and utilize the results in modern architecture.

DIFFERENT SCALES

Egyptian architecture the offspring of which is European architecture, is monumental. It displays a leaning toward huge rather than attractive structures. The propensity of the Egyptian architect to build on a gigantic

scale was left as a legacy to the ancient Orientals who likewise endeavored to impress with grandeur rather than beauty. These architectural concepts prevailed up to the times of the ancient Greeks.

The Greeks were the first to break with these traditional principles, for they were a small nation and well aware that in respect of scale they would never be able to compete with their predecessors. And since they could not do without beauty they began to build on a smaller scale. The beauty of Greek architecture lies in proportion rather than in size. Looking at a Greek structure one has the impression that one element grows out of the other with the result that they all together form an organic whole.

The Greek temples are rather small, yet they impress us with their harmony of proportions. The Greeks conceived a temple type which they gradually improved, and the size of which they adapted to the size of the locality in which the temple was to be erected. The proportion between the constituting elements, however, was left unaltered. The consequences of such a procedure are far reaching. Let us consider the following example: the size of our door is such that it permits a person to pass while that of a Greek door is in proportion to the structure i. e. when the structure is small the door is small, too. We shall call this kind of architecture — objective architecture. Since the Greeks consistently stuck to the same basic temple pattern, it attained a perfection for which it is still admired and considered to be classic.

The Renaissance architect simply took over the Greek concepts of scale, i. e. a scale arising from architecture itself, and created beauty in structures which in themselves were organic wholes. St. Peter's cathedral in Rome does not appear large yet when we become aware of the fact that we do not hear the mass sung at one of the more distant altars, we suddenly realize how spacious the structure is.

What is our relation to scale? We live in the socialist era the center of which is society, that is — the man. The chief concern of our architecture is to build man a habitation. But in order to give man a fit habitation we must proceed from his standard of living.

In the beginning the villa of the capitalist aspired to become a Renaissance palace. Later, however, its designers began to draw freely upon the experiences gained in the construction of the dwelling house owned by the working classes which in order to be in harmony with the owners standard of living, was built on the human scale.

And although we do not want to build palaces, and in spite of our efforts to find an appropriate scale for our buildings, we somehow fail to design a harmonic structure. Let us only look at those one-family houses constructed before the war: they are neither high nor low, have no relation to nature and are planless and unharmonious.



Store open toward the street

MONUMENTAL ARCHITECTURE

The charshiya, as the oriental business district is called, represents a criss-cross pattern of streets with a multitude of shops the front of which open into the street, or, to put it the other way round, the streets pour into the shops.

The shops are so small that the artisan or business man squatting on the floor, has only to stretch out his arm in order to reach an article or tool lying all around him. And since the streets are narrow and the floors of the shops a little higher than the street level, the prospective customer can readily survey the articles displayed in the shops. One or two steps and he is close to some repoussé work, embroidery, fabric, or oriental sweet meat, set out on the shelves.

The charshiya is a low horizontally developed business district criss-crossed by hundreds of narrow streets and dotted with shops each of which is a production, exhibition, and sales center all in one. This business center is basically different from the skyward aspiring American cities, and we can see that it is designed on the human scale.



View of cemetery through window opening in wall in the height of man

Fences with Windows

The structures of a religious character are usually separated from the charshiya by brick fences containing oblong window openings placed in such a manner that passers-by can look through them. As a rule the windows are latticed, very likely with the view to make the world hidden behind the fences mysterious and more attractive. The fences look as if they were hung with paintings. The views obtained in this manner beggar all description. It is a miracle how it was possible to create with a few elements such breath-taking pictures.

Places of Seclusion

Nooks in which a rambler can repose from the numerous impressions gathered during his walk along the streets, are one of those features of the town which show with what virtuosity the architects mastered their art.

When we venture into the world hidden behind the fences referred to above, we find at the entrance a small place in which we can pause, forget the impressions from the street, and prepare ourselves for new sights (a mosque) — all of which are waiting to be inspected.



Bey's Mosque's court with fountain

Vaults — Turbehs

When a European enters a vault he is surprised to find the structure so low — one must stoop in order to get through the door. The windows are placed only a little above the floor, and everything is reduced to the size of the man squatting and brooding before the sarcophagus. Over the whole structure arches a dome. The dome is an element which rises on one side, only to come down again on the other. Since the Oriental squats on the floor the horizontal plane passing through his eye is for 45 cm lower from that passing through the eye of the European sitting on a chair. Thus posture has greatly influenced the size of the enclosed space. This fact makes us aware, first, of the relativity of the third dimension; second, of its role played in composition; and third, of the various possibilities of space molding.

Mosques

Bey's Mosque is a huge structure towering over the Charshiya without, however, giving the impression of being inaccessible. It rises like a pyramid from the narrow streets, from the man standing before it, over the low shops and basilica-like hans, up to the small domes of fountains, and still higher to the huge central dome and the minaret.



Cube of Ali Pasha's Mosque

The grouping of masses from the level of man up to the minaret, the reduction of all elements to the human scale, the skill with which the impression is conveyed of a grandeur so different from that of the monumental Egyptian and classical Greek buildings, make the structure one of the finest masterpieces of architecture.

The mosques found in Bosnia were built in accordance with the Byzantine architectural concepts. It would be interesting to inquire into the question of how the Turks utilized these concepts, and how they modified them in order to produce an architecture on the human scale.

The builders of Orthodox churches likewise drew upon Byzantine architectural ideas. Looking at these structure we get the impression that they take up no space at all, so small do they seem. Grachanitsa, for example, is made up only of the exterior while Hagia Sophia is nothing but space. When did spaciousness of Roman and Byzantine structures get lost?

Compared with Catholic churches the mosques are, it is true, small. Yet they make the impression of being large.

Let us examine the mosque erected by Ali Pasha. Where is the modern architect whose skill is so great that he could utilize this cube without



Bey's Mosque and Clock Tower are the highest constructions in the Charshiya

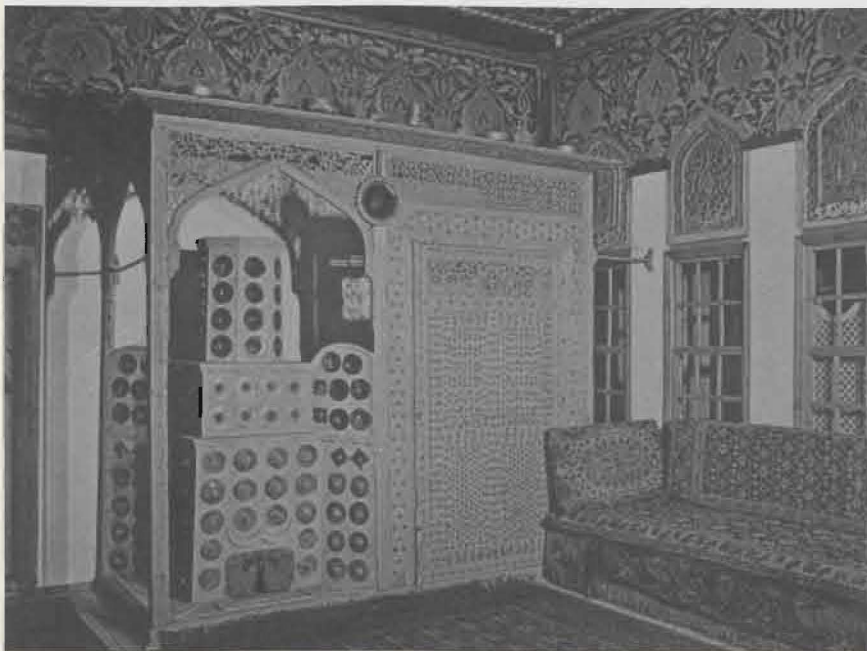
robbing it of its grandeur? How was it possible with a few architectonic elements to make Ali Pasha's Mosque so impressive? The structure is neither large nor small. The interior is a hollow cube covered with a calotte. The entrance lies in the longitudinal axis of the structure. The pulpit showing clean straight geometrical lines, stands free. Behind it is a railing the upper edge of which is 45 cm lower than the European horizon. The floor is covered with a huge rug. A European night find the mosque somewhat bare — yet it comes to life when the multitude of the faithful begins to surge over the carpet.

The Greeks with their harmonic structures, were the first in history to rebel against architectural megalomania. They succeeded in creating a fine architecture on a small scale.

Oriental architecture, however, succeeded in representing small structures large. Since this art has adopted man for its basic yardstick we shall call it here subjective architecture.

TRANSITION ARCHITECTURE

In order to make the structures carry as little dead load as possible the designers of airplanes, railroad cars, steamships, and other vehicles have



Moslem room with partition wall and built-in benches with cushions

constructed the various passages, W. C.'s, bathrooms, kitchen offices, etc. only so large that one person can move freely in them. This concept made its first appearance in the machine world and has been only recently introduced into architecture.

Renaissance architectural concepts demanded three to five times more spaces for a man than he actually needed, for it was held that otherwise the room would not be airy enough. But, as a matter of fact, the Renaissance architect did little care what might happen to man, his chief concern was to make the height of his structure proportional to its area.

Until recently the modern architect had to conform with regulations prescribing minimal height, which simply ignored the area of the structure. Stress was laid on height while more subtle problems concerning space were neglected. As a consequence of this our structures looked like poultry houses — they were neither small nor large, they showed no attempt at space molding.

The Oriental House

The oriental, like the modern Western houses, are built on the human scale. But while we are still groping our way, the solution of the problem was found long ago by the oriental architect.



Roof skeleton in Moricha's Han

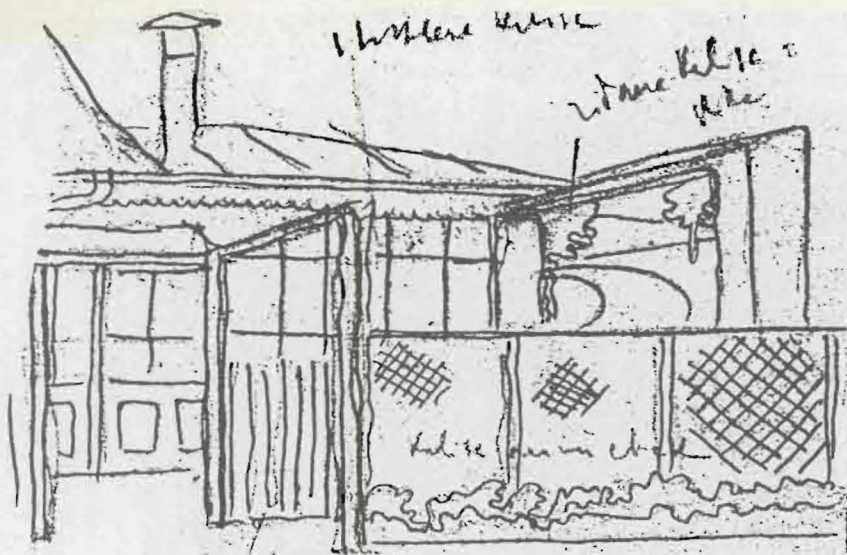
While our houses are crammed with Renaissance furniture the oriental house is almost empty. The only pieces of furniture are a built-in bench, used as a bed, a table, a chair; a built-in wardrobe, and a stove. Such furniture goes a long way toward making a room clean and spacious.

Since the house does not develop vertically, it remains low, flat, modest. It represents a synthesis of hundred different factors all of which are based on the requirements of man. We shall call such a house anthropocentric.

Since it is very difficult to get admission into one of the private houses, we shall confine ourselves to public buildings such as hans and coffeehouses.

Moricha Han

Entering the han from the Charshiya, we find that the structure is built on piles. The first floor consists of nothing but pillars between, which some storerooms and stables are placed. Two stairs lead to the second floor across the middle of which runs a corridor lighted through the roof. On either side of the corridor are small cell-like rooms. In one corner the corridor widens and a window opens into a divhana. Along the wall of the divhana runs a bench, the floor is covered with oriental rugs; the low



Light perforated fence before a small café along a lane

ceiling is a wooden filleted surface. There is no other furniture in the room save a little hearth on which coffee is roasted. Between the ceiling and the floor is nothing but free space. Because of its low height the room seems spacious. The wooden ceiling, the glaring white walls between the windows, the rugs on the floor, all are within reach of the occupants.

Coffeehouses

Why are these structures so very attractive? They consist of several slender posts nailed together and plastered or provided with panes. The roof of a coffeehouse is made of tarboard or sheet-metal. Usually several pavilions are placed close to one another around the fountain, in a square, above water, in the air, or amid green trees on a hill commanding a fine view.

The triem before the »Stadion« coffeehouse is especially noteworthy: it is only so high that a person can stand up under it and not wider than an aisle in a railroad car.

The height of the ceiling of the coffeehouse itself does nowhere exceed 2.30 m. One has only to stretch out one's arm to touch it. Since the ceiling is wooden it is warm and makes for intimacy. The room appears lower than it really is because of the dense rows of tables and chairs placed in it. We have the impression that the room is relatively wide and spacious.

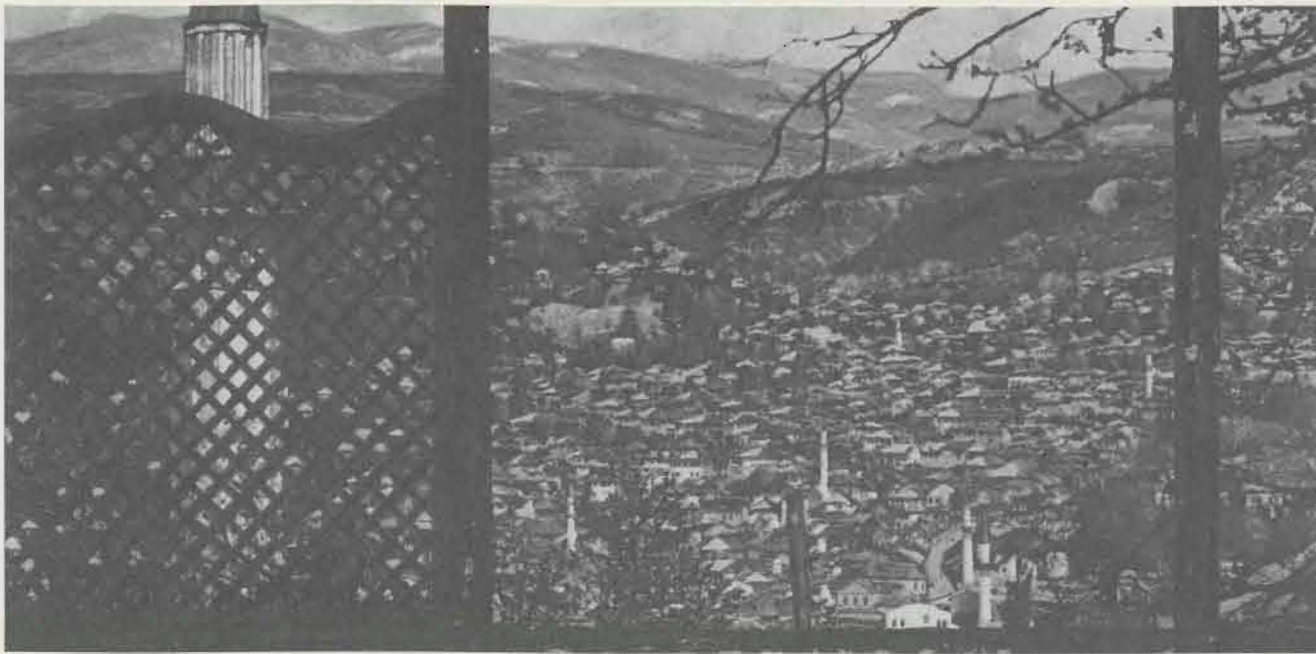


Wooden two-storied space with the floor on piles of the Jekovac Café

Beside the chairs and tables there is no other furniture in the café. In one corner, or sometimes in the middle of the room, is placed a hearth with glittering cups and pots on a shelf. The rest is clean flexible space enclosed by a glass or wooden screen. The patrons of the café have only to look round in order to obtain an endless variety of views: the crowded street, the hurrying passers-by, the green gardens, the river, or the whole town. It is sometimes difficult to say where the café ends and nature begins, for in summer the glass membranes are taken away and between the table and the ceiling remain only, the light wooden frames in the horizon of the patrons.

With these cafés it is the same as with the Alhambra known usually only from pictures in which no human being is represented. But when the magnificent structure is seen in nature then it becomes alive because its beauty is intrinsically related to man. We can admire the beauty of St. Peter's cathedral or that of a Greek temple regardless of whether a man stands before, or in, them, whereas the structures we are discussing now, are so dependent on man that without him they seem dead.

While we can understand how it is possible to bring the street and its near environments close to man, it is almost inconceivable how it is possible to bring all the nature and the whole town almost within his arm-length as it is done in the café **Yekovats**. How was it possible to conjure the impres-



View from verandah of the amphitheater —
like Sarajevo

sion that one has only to stretch out one's arm to play like a child with the little houses scattered all over the opposite slopes.

This phenomenon is very likely due to the skill with which the café was placed — or, perhaps, to the fact that the houses opposite are designed on the human scale and placed so harmoniously that the distance between them and the spectator seems to shrink to nothing.

VISTAS AND THE RIGHT OF VIEW

There are several factors which deeply affect modern town planning, as well as the preservation of historically important structures and areas. Among these is also the postulate that every inhabitant of a town is entitled to have a view from his habitation. We shall call this right — the right of view R. of V.

On the basis of this postulate and without any theoretical or philosophical considerations, many fine and picturesque settlements were laid out at a time when **feeling for space** was in the people themselves rather than in voluminous treatises. If a law were issued by our legislation for the regulation of this question then the old town districts would not lose their picturesque and attractive pattern.

The old town of Sarajevo boasts of many instances in which the right of view is granted. These instances are all the most noteworthy because

they are found in a country in which structures were erected on the basis of unwritten laws and in which the builder's guiding principle was **consideration for the neighbor**.

The instances contained in this book have been collected in those parts of the country which are inhabited mainly by Moslems and in which the only pastime of women is to admire a fine view from the house. Here the right of view does not concern only the individual but the whole community.

The pictures accompanying this chapter show the relation of structures and whole town districts to their environment. The principles from which this relation springs are very simple:

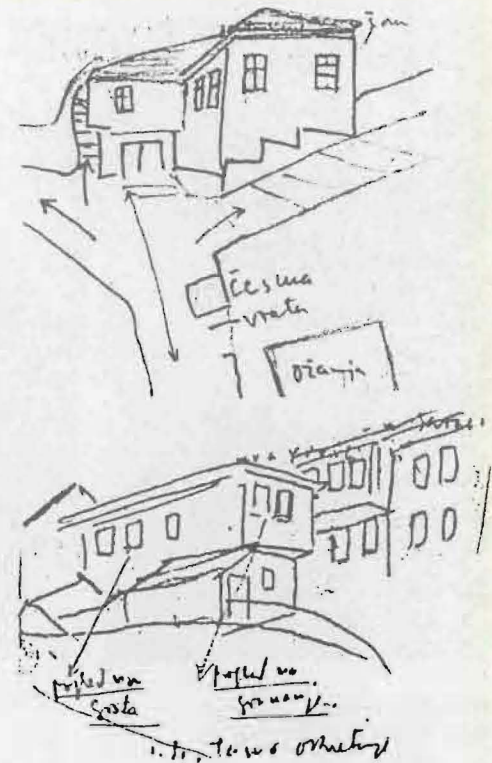
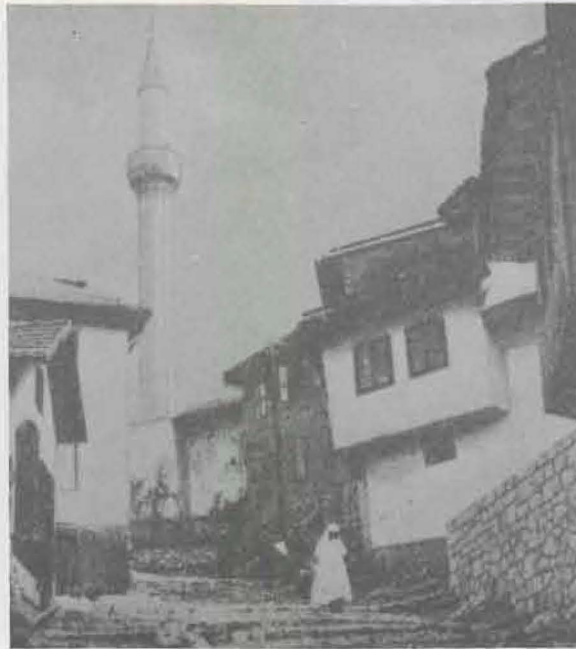
In the valley where no extensive view can be obtained the builder constructed on the first floor a balcony, called the doksat, from which the tenants can watch the life and the bustle in the street below.

Whenever it was possible the houses were placed at street crossings where picturesque views could be obtained.

If the house was erected on the street leading to the market place, attempts were made to give it such a position that the market place with its life could be overlooked. The neighbor who built his house later, placed it in such a manner that he, too, had a fine view but at the same time he



Window position on a slope offering a view of the valley

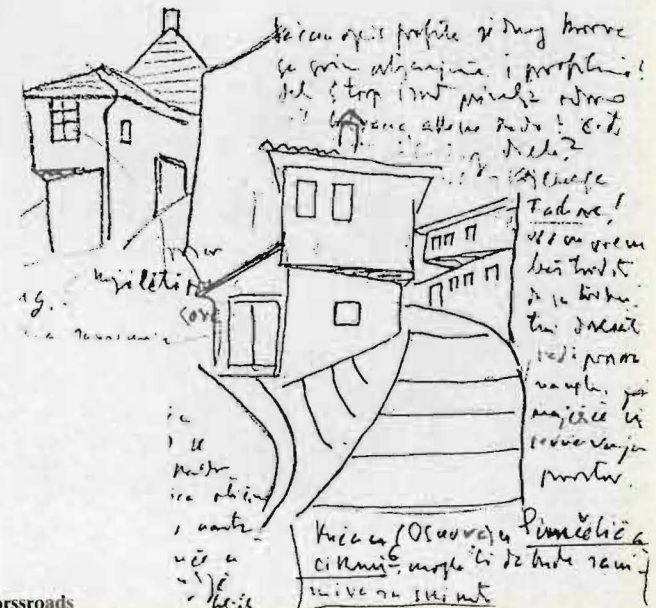


took care that his house did not obstruct the view from the neighboring houses.

Then we see again how houses were built on the uphill side of the street only so high that they commanded a view over the houses below. That such an arrangement is not accidental we can see from the fact that the stables, woodsheds, summer kitchens, and privies which do not require views, were placed in such a manner that they were more or less hidden by the dwelling house.

The steep streets leading uphill show usually a stairlike pattern, while the level streets crossing the former are laid out in such a manner that the houses along them do not obstruct the view. Sometimes we find houses on a slope arranged amphitheater-like around a part of the town, so that it is possible to view the lower from the higher lying houses, and vice versa.

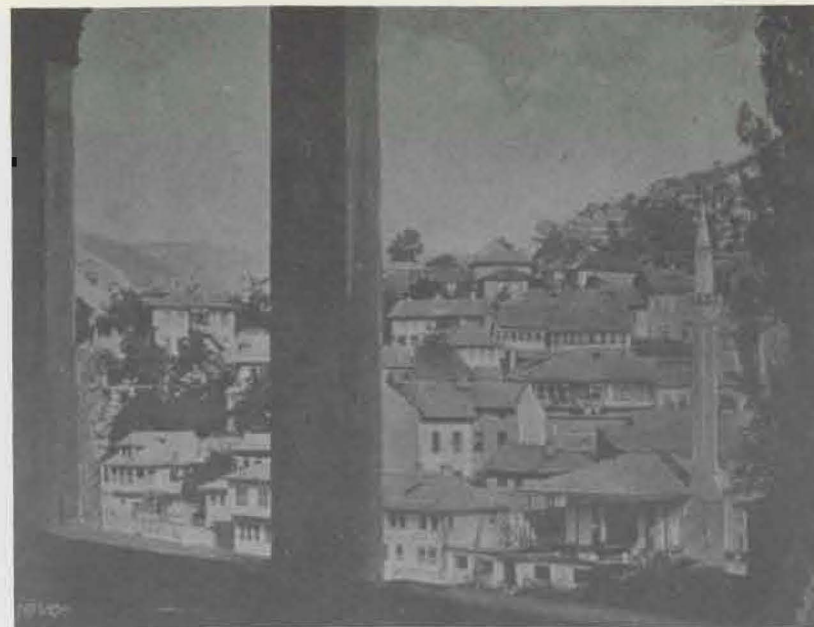
While great care was taken that the dwelling house should command a fine view, the public structures were placed so that they attracted the attention of the far and near observer. In this respect the role of the tree accompanying the mosque is especially interesting. It is not enough that the mosque catches the eye with its cupola and minaret, but there are also green trees which can be seen from a distance and which draw our attention to the mosque. As to the linden tree found in the courtyards of



View of a guest at the crossroads



Small houses on the slope — a poplar emphasizing the mosque



View from window of the houses on the slope

mosques, it can be said that they were planted because their leafy branches give shade. The slender minaret-like poplars, however, were no doubt planted with the view to direct our attention to the mosque.

One is surprised to discover by means of what simple devices these people brought the house, the street, and a whole town district into a harmonic relation to the environs. It is a great pity that we have lost sight of this feeling for relationships. The unfortunate building regulations of the capitalist era permitted houses to be built in dense clusters. Consequently, the views from many fine old houses were obstructed and tenement houses with their bare dreary walls began to mushroom all over Sarajevo. In this way many fine views got lost.

The days of a civilization the representatives of which were able to create with the simplest devices such harmonic wholes, are counted; and it is our duty to do something to save and preserve those concepts on the basis of which the fine structures were erected.



Undulate mountain scenery with domes in the valley and houses on the slopes

DOMIFORM AND CUBIFORM ARCHITECTURE

Sarajevo

A backdrop of mountains, domes in the valley, houses placed in layers on the slopes — that is the town of Sarajevo.

The houses are low pyramids, roofs rise above roofs, below the roofs are cubiform doksats forming picturesque spatial patterns.

The houses are arranged around some central structure — triangles dancing around domes.

Dome by dome in the valley of mosques, mausoleums, hans domiform architecture.

Doksats beside doksats: cubiform architecture.

Here and there a minaret aspires skyward.

Sarajevo is a town of pure geometrical solids: cubes, pyramids, cylinders, cones, calottes.

Building Material

The domiform architecture is built of stone while the cubiform is constructed of wood.

The domes are made of stone: those of hammams because of dampness, those of bezistans because they must be fireproof, those of the mosques in turbehs because of the sacred nature of the structures.

The doksats protect the wooden frames filled with unburnt bricks. They serve as passages on rainy days and are a spatial element of the Orient unlike the dark arcades of Europe.

They express the functionality of oriental architecture.

Purpose

The dome conveys the idea of mass gatherings, while the doksat is a product of the desire to gather in the family circle. Therefore, the latter is shut off from, and rises over, the outer world. Thus we can distinguish between small and large gathering places — one is for individuals, the other for the masses.



Low-roofed houses on the slope



Parts of the house overhanging the street are wooden and protect the underlying walls made of undburned bricks



Sarajevo, the town of geometrical configurations: cubes, small pyramids, calottes, cylinders, and cones

Scale

All these elements would differ but little from the European, if they did not result from the principle that small elements must be counterbalanced by large ones: the small window at which girls flirt with boys by the large lattice window in the divhana, the small gate between the women's courtyard and the garden by the main entrance gate, the small roof over the gate by the large roof over the house, a small dome by a large one. This gradation endows the structure with rhythm and makes it proportional to the man.

The Renaissance dome is an independent semicircular structure containing a lantern and a tambour. The oriental dome on the other hand, has neither a lantern nor a tambour so that its interior can be easily surveyed. In the Renaissance dome an attempt is made to create another sky somewhere high above the spectator, who, consequently, has great difficulties to overlook in one sweep the huge hollow structure. In this respect the oriental architecture is much nearer to the man: it created a dome which can be readily surveyed and is almost within arm length. Moreover, it also creates the skyward aspiring minaret.

Dual character of the old Moslem architecture: domed in the Charshiya and cubelike in Mahalas

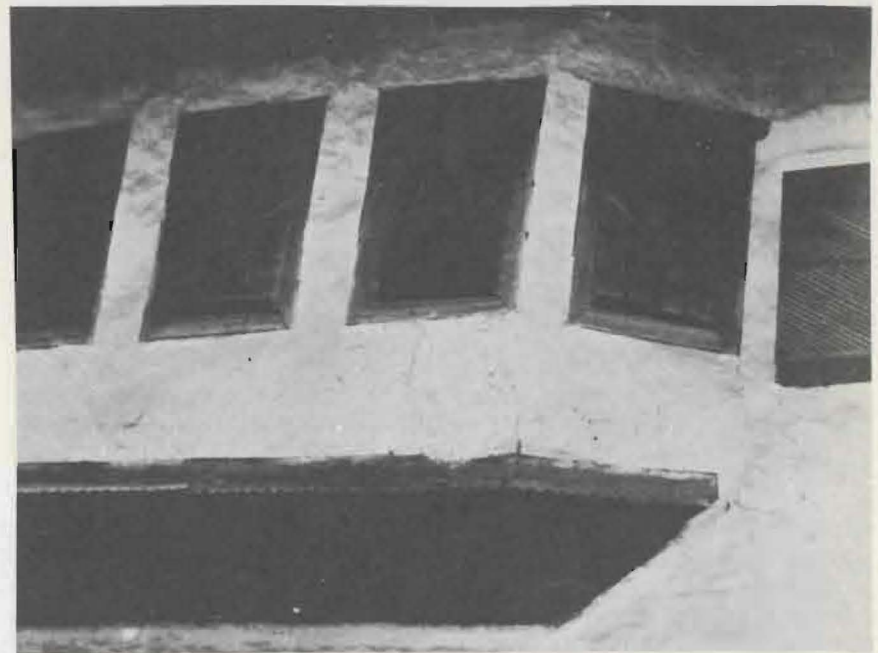


Utilization

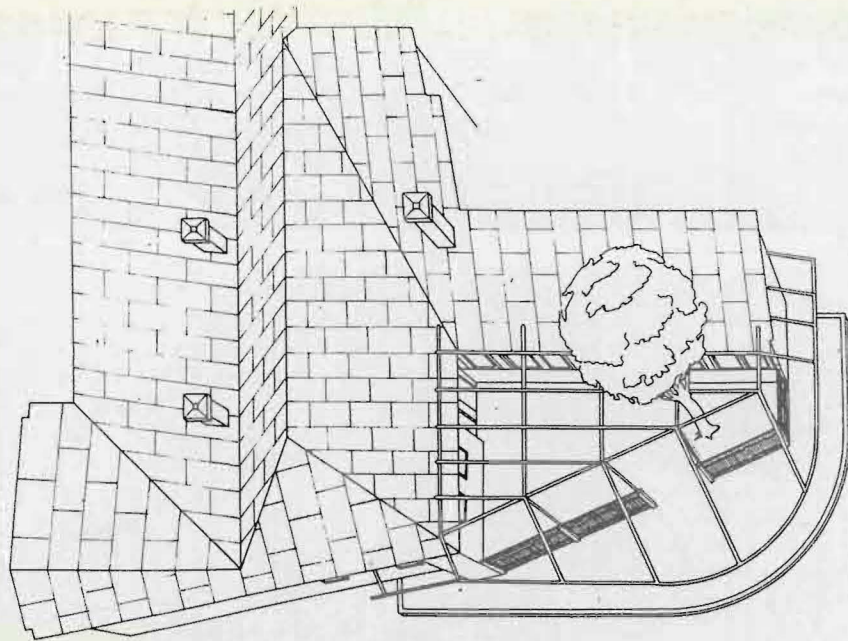
Europe has adopted the oriental principles of horizontal and vertical arrangements of vaults and utilizes these principles in modern continuous vaults.

Since the early oriental architect was not able to cover large structures with one continuous roof, he utilized a number of domes. Today, however, it is possible to cover also very expansive spaces with one single parabolic or segmental slab made of reinforced concrete.

The analogy existing between the oriental wooden and modern reinforced concrete cantilever permits us to couple several doksats into one oblong floating structure resting on posts.



Part of the house overhanging the street with wooden lattices on windows



Atrium of the Volga Café on the sidewalk with a tree

SPATIAL ARCHITECTURE

The Mosque

In Brusa, Asia Minor, there is the so-called Green Mosque. We enter it through a small door and come to a small vestibule where we can relax from the impressions gained in the street and can prepare ourselves for the sights in the interior. From this vestibule we proceed to harem a large chamber laid with marble and flooded with light. Thence we come to two smaller semidark chambers and finally to two more even smaller chambers which are quite dark. Space, light, and scale are almost the sole means by which the miraculous atmosphere is created.

Coffeehouses

The main room of the »Aeroplan« coffeehouse is placed on the first floor and is completely enclosed by walls. It is accessible from the street running on the other side of the building. From the street we come to a small room where the impressions we brought with us from the street, are interrupted. Then we come to a courtyard transformed into an atrium with a hypaethron in the middle. From here we can view the clock tower and the cupola and minaret of Bey's mosque. All around the courtyard are



Divhana of the Bendbaşa Café

triems used as summer cafes from which stairs lead to the first floor on which the main room is placed.

The summer »Stadion« café consists of a number of pavilions all of which are arranged around an atrium with a fountain and trees. In summer the glass walls are taken away so that the atrium pours, as it were, into the inner space of the pavilions.

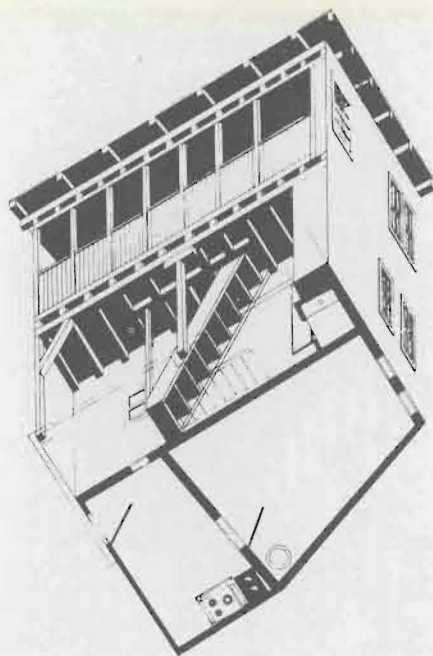
The whole atrium of the Moricha han rests on posts behind which are grouped stables and storerooms.

The front side of the atrium of the »Volga« café opens directly into the street while around the other three sides the structure of the coffeehouse itself, is placed. Over the part opening toward the street, is placed an awning.

The House

It is probable that in the beginning only a kiosk existed which later was put against, or built into, the house. The result was a divhana and a kiosk house as contrasted with the monument house of the temple type.

One-piece stairs built-in in verandah



The divhana then is nothing but a wooden sheathing before the massive core made of unburnt bricks, or, in other words, a wooden two-storied room with the floor resting on posts. The European house has no such room although attempts are being made to develop a similar room in the form of a two-storied living room.

The stairs leading to the divhana are placed in such a manner that the person ascending them commands a view in all directions — horizontally, vertically, diagonally, through the courtyard, into the street, toward the town, and up to the sky.

And while the European house is a closed box the oriental develops into the outer space and contains closed, semiclosed, and open spaces.

It seems that in the beginning only an open fenced space existed in which eventually a kiosk was placed to which later rooms were attached. Such a house embraces the courtyard as if with arms, and its significance lies in that it does away with the stiffness and schematism which are the main features of the European house.

While European houses are arranged along the streets the oriental are placed in courtyards. The tendency of houses toward rotation makes them look like nests linked by neighborliness into mahals, and these again into an organic whole — the town.

The Atrium and the Meander

While the mahala meanders, the charshiya is straight and built up. In the latter, of course, building sites must be economically utilized; hence the trend to arrange the structures in the charshiya in connected rows.

The meander-like pattern of the mahala is not only the result of overlapping but also of the fact that the houses themselves display a curviform layout.

We must not forget that the oriental town planning utilizes relatively low, usually one- or two-storied units while modern town planning prefers multi-storied structures the scale of which varies within wide limits. On the other hand, we must bear in mind that the shape of the oriental house is partly conditioned by the ventilation of the interior which, being the house low and hollow, is relatively efficacious, while the multi-storied structures, especially those erected during the 19th century, led to stuffy and dusky backyards.

Application

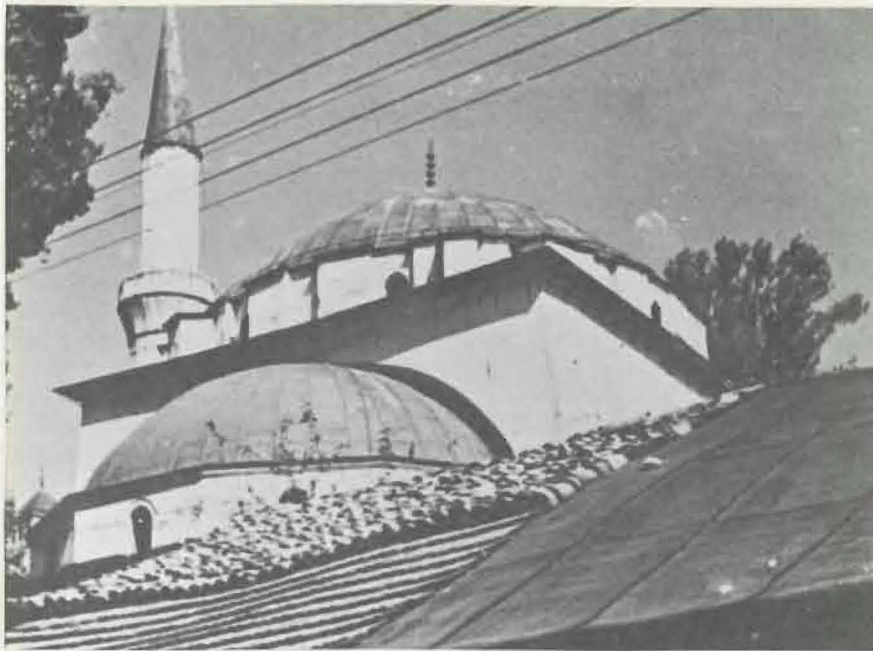
While the oriental town-planning proceeds from the spatial concept of the atrium — the meander, the molding of free spaces with structural units serving as backdrops, is a Western contribution to modern town-planning.

The oriental two-storied house pattern can be utilized in modern structures by inserting them along open and covered corridors of a multi-storied building. Such apartments with gates, courtyards, and stairs enable us to lay out meandering corridors and interior streets, and to steer clear of the monotonous, enclosed corridors. Moreover, in each of these apartments each family could live separated from the others.

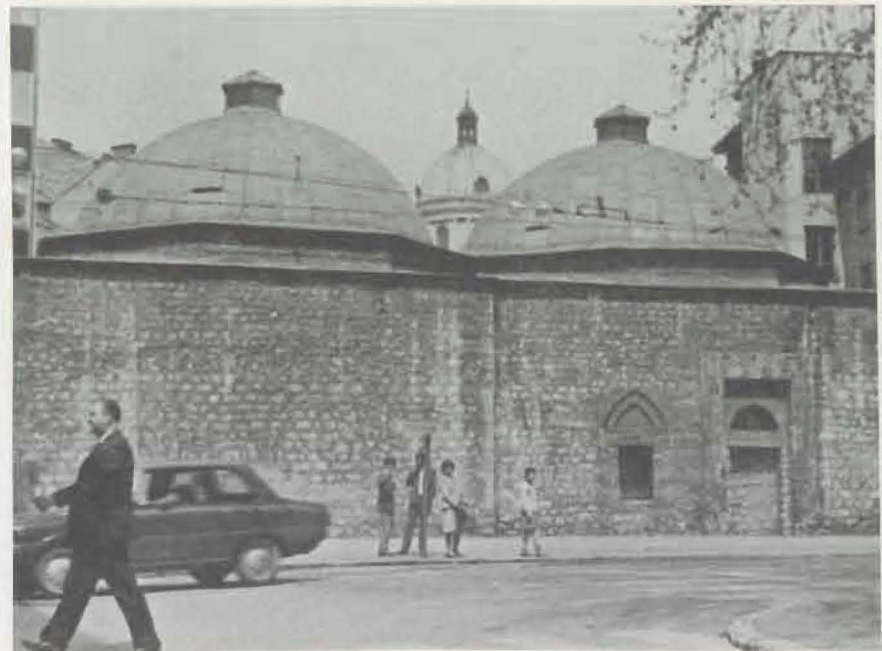
Since the fusion of several such units into one under the same roof affords a better layout and is much more economic, there is no wonder that attempts are made in modern town-planning to utilize, especially on level land, such an arrangement, both in the horizontal and vertical direction. Le Corbusier utilizing meander patterns succeeded in setting the modern town into a wide spatial framework.

In Bosnia, however, where the country is predominantly mountainous, with few valleys and little level land, it will be necessary to make a distinction between the structure located on slopes and those located in valleys. The houses on slopes will have to be adapted to the site and will consequently be lower and smaller than the high and large structures in the valleys.

Thus it will be possible to differentiate the structures into low-closed, medium-sized semiclosed, and high-closed houses and to introduce into Bosnian town-planning the old relations between structural units: a stratiform spatial pattern, pyramidal architecture and the human scale.



Gazi Husrev Bey's Mosque — a durable construction, arched on pillars



Gazi Husrev Bey's Hammam (steam bath) reconstructed for a night club

CONSTRUCTION

Permanent and temporary structures

The structures of old Sarajevo can be grouped in two classes: permanent, built of resistant materials and temporary, built of less resistant, perishable materials. The permanent structures rest on posts and are vaulted: mosques, shools, of divinity, hans, warehouses, bazaars, and hammams, all of which consist of prisms and calottes resting on posts.

As contrasted with Gothic structures the space of which is enclosed on the inner side of pillars, the oriental building is enclosed by a mantle of harmonic solids which make for a flexible interior.

Temporary structures, first of all dwelling houses, are similarly constructed. The wall of the ground floor is made of unburnt brick, while the first floor, uninhabited in winter, consists of a frame filled in with unburnt bricks or sheathed with clapboards. Instead of a vault we have here a ceiling supported by joists, and instead of pillars a timber frame resting on a masonry wall. All are pure geometrical solids: prisms and pyramids.

The Meander and the Console

In timber frames it is easy to develop a corbelled construction of doksats and to meander them in space. If we compare the timber frame on the first floor of the Bosnian house with the European wall of squared logs, then we must admit that timber is very economically utilized and that, in spite of poor building methods, it is possible to develop very flexible ground plans. The wall can be meandered or props utilized instead of a wall, so that the outer space pours into the interior. On the other hand, the light frame and the posts permit the construction of the balcony-like doksats.

Thus it is possible to give the house a flexible shape i. e. the shape of the first floor can be made different from that of the ground floor. The ground floor of the house meanders with the street, while the first floor with its choshaks and doksats hangs over it. There is quite a difference between such a house and the Western brick building which is rigid as a closed box.

Supporting Elements

We can divide the elements of an oriental structure into load-bearing slabs and the meandering frames which support them.



House construction for one generation

Load-bearing slabs are ceilings and roofs consisting of joists and lathing, and rafters and beams, respectively, nailed together with planks into slabs which transmit the load to the nearest supports.

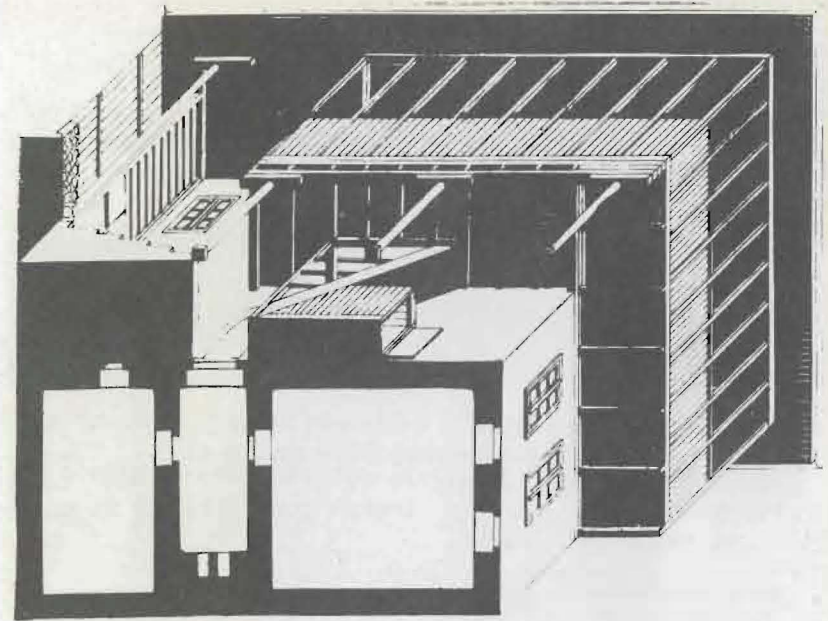
The supports are the massive walls on the ground floor, the frame on the first floor, and the posts on the garret.

The supporting slabs or ceilings permit the construction of doksats, while the timber frame permits meandering and spatial molding of rooms. It is not even necessary that such a wall rests on the lower massive brick wall as this is the case in Western brick structures. With this the Oriental structure approaches what is called a free ground plan. Is, for example, Moritsh han resting on props not similar to structures designed by Le Corbusier? The difference lies only in that here the procedure results from architectural feeling rather than analysis. And yet we must not depreciate the significance of these structures which built with primitive technical means and of frail materials, show such a wealth of forms.

Transformation

Let us divide the building methods into three groups:

1. The rigid Renaissance structure in which brick wall is placed over brick wall.



Cantilever construction of the parts of a house overhanging the street — free ground plan and façade

2. Le Corbusier's reinforced concrete skeleton structure supporting the ceiling.

3. The oriental frame structure in which the ceilings are supported by frames.

In 1951 two architects made an attempt to do without Le Corbusier's reinforced concrete skeleton by transmitting the load from the skeleton to the reinforced partition walls. They divided the structure into floors which carried the load and partition walls which supported the floors. The floors themselves are made of reinforced concrete grating filled in with hollow gypsum slabs. Thus it was possible to meander with the partition walls and to utilize them for molding recesses, wardrobes, jutties, etc. These elements being similar to cells, the system was called the cell system although it does not essentially differ from the oriental meander system. The two architects used reinforced concrete gratings instead of wooden beams and cross beams, and isolated concrete wardrobes and jutties instead of meandering frame walls with doksats. This system is especially useful for multi-storied dwelling houses, and it is expected that it will soon supersede the two other systems, for the meander system as contrasted with the rigid Renaissance system, makes for a flexible ground plan and façade, and is much cheaper than Le Corbusier's system.

TEXTURE SURFACE

I.

Some five hundred years B. C. Lao Tse said that the essence of the house does not lie in its four walls and roof, but in the space they enclose. He also added that the heathen whom to-day we call classics, did not grasp this truth.

The Greek temple is nothing but a sculptural formation and the naos is small and quite unoriginal. Under the influence of the Orient the Romans somewhat modified these architectural concepts but could not give up the pure schematized interior of their structures. Consequently, Pantheon is nothing but a stereotype sphere.

The Renaissance building again is a box with rectangular rooms placed along straight corridors and dependent on the ground floor.

The essential picture of classic architecture does not lie in the molded space but in the sculptured walls.

Oriental architectural concepts are different. Their first concern is space which can be molded with partitions. The wall is an attribute of space, a necessary evil. While the classics sculptured the wall, the Oriental utilizes it only as a backdrop which, if constructed of inferior materials, is faced, hung with carpets, or plastered.

II.

Characteristic for oriental decoration is the dwelling house. How impressive it is in spite of the fragile material of which it is made. If we analyse the house, we shall find that in its construction six basic materials were used: tiles on the roof; wood, plaster, and glass on the first floor; stone or unburned brick and, perhaps, iron network on the ground floor.

The ground in front of the house is paved with cobble stones. The walls of the ground floor are made of stone and contain a few openings provided with iron network. The walls of the first floor are made of unburned clay and plastered. Then there are window frames, Venetian blinds, lattices and a carved cornice under the tent roof.

The decorative effect is produced by means of the snowwhite plaster, the brown velvetlike wooden facing, the glittering window panes, the dark iron cross-stone walls between the restless tiles on the roof and cobble stones on the ground, the play of nets and bars — a mosaiclike pattern bars, and the red roof. The restful combined in the desire to attain a harmonic whole.

Such a mosaic impresses us with its interconnection, repetition, parallelism, rhythm, proportion, tone, texture, and material. We shall call this

effect produced by the surfaces, textural decoration in contradistinction to tectonic decoration. Textural decoration affords us a more direct means of expression than the tectonic decoration which impresses us only indirectly through its static and constructive composition.

III.

But the relationship between this architecture and its environment does not show only in the texture of the material. It would never do to view this architecture separated from the surrounding nature. Religious consideration, it is true, do not permit the Oriental to imitate nature, but he is ne-

vertheless closely linked to it. In this relationship between man and nature, the surface plays a special rôle.

The surfaces, as has been already pointed out, are formed by the massive walls of unburned brick, the frame screens, the window frames, the lattices, and the horizontally or vertically placed clapboards.

The charm of this architecture lies in the harmonious relation between the snow-white cobblestones and green lawns, the massive meandering walls and the branching trees, the tiled roofs and verdant environments.

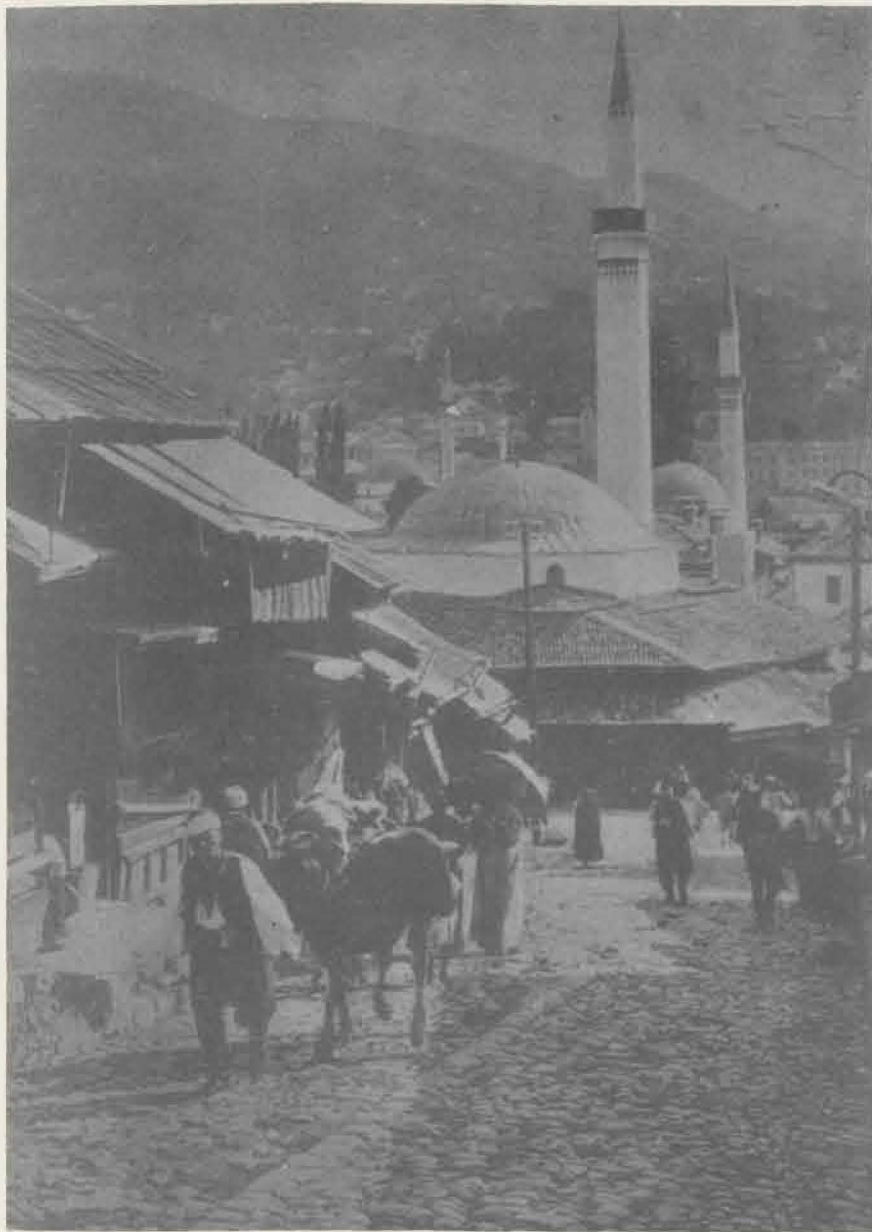
Then there are other decorative elements as, for example, the geometrically shaped lattices, Venetian blinds, window crossbars, wire nets, etc.

With such transparents it is possible to give the environment a geometrical and architectonic appearance, and utilize them as an element of composition.

The environments can be formed by either a combination of nature and architecture as represented by the garden city and the Bosnian cemetery or pure nature as, for example, a hill or meadow, river or tree, an animal or a human being.

Thus it is possible to use nature as a decorative element, as a backdrop for man-made structures, or as a picture looked at through a latticed window. This nature can be either static or dynamic, can either move before the spectator or the spectator can move before it with the result that he views an ever changing panorama.

We find here a multitude of various approaches to the problem of decoration, all of which, however, are basically different from those utilized in Western Europe. We endeavor to either mold or imitate nature while the oriental leaves it untouched and tries to conjure it into his house unspoiled.

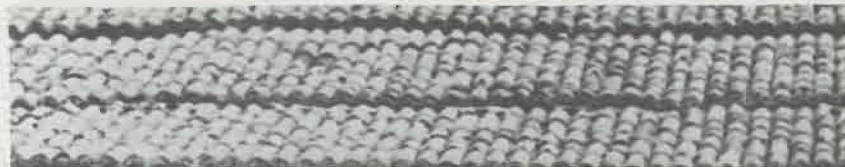


Masterly grouped construction masses, from man to minaret — Čekrekčija's Mosque in the Charshiya

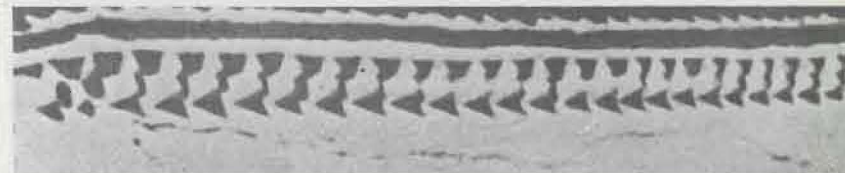
Lead



Roof tiles



Plaster



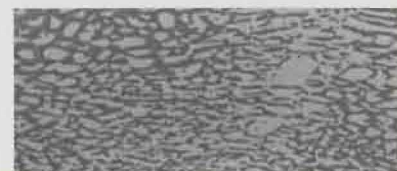
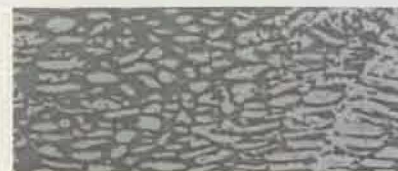
Wood



Stone



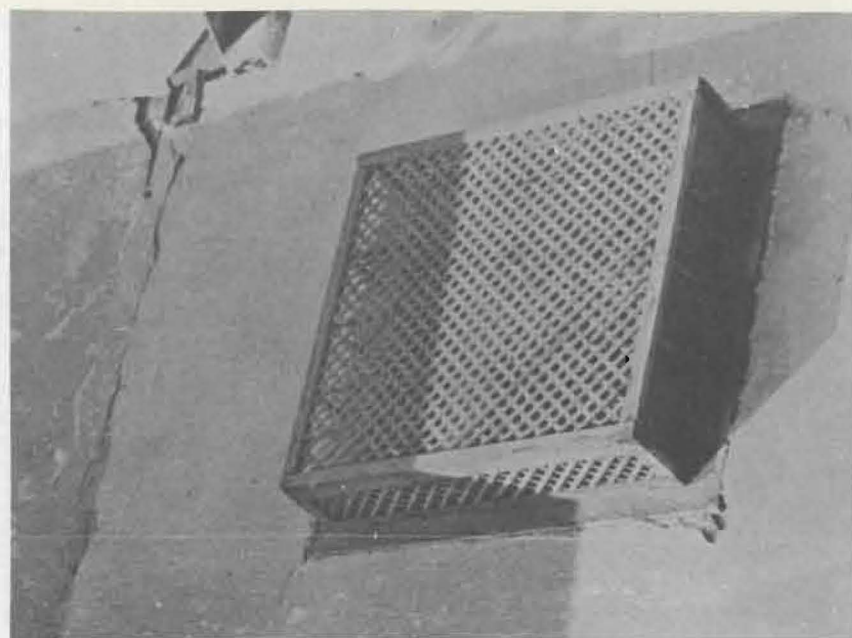
cobble stone



Basic materials of Bosnian Oriental architecture



Window in a wall fence of the Gazi Husrev Bey's Mosque, in man's height



Wooden lattice — flirt-window



House for everybody
made of six basic
materials



Wooden lattice — flirt-window, lattice
fenced



Tarabas (lattices or planks) on a wooden minaret



Carved cornices under roof tiles



Fountain in the courtyard of Ali Pasha's Mosque

IV.

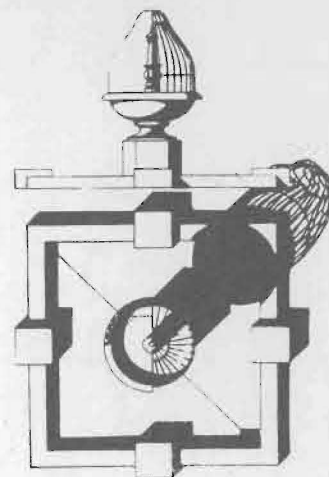
The sculptures found in these places are especially interesting. They are represented by pulpits, hearths, fountains, wells, gravestones and minarets. A sculpture is never found isolated, there always exists a close relationship between it and the space in which it is placed. A sculpture is an index of the function: of a place, structure, or even room. The hearth is the symbol of domestic life, the fountain of the mahala, the minaret of religion, and the gravestone of a cemetery.

Especially interesting are those cases in which the Oriental makes an attempt to mold them. He decorates them with chased-work, perforations, and incrustations so that they look like costly trinkets displayed in the open air.

In connection with this the reader's attention must be called to the decoration must be called to the decoration of the numerous recesses, corners and passages with carved or plastered cornices. The elements are pointed hollow prismatic solids similar to stalactites.

These decorative elements found in alter niches, on portals and cornices, are basically different from purely geometrical motifs.

Similar is the lacelike decoration transferred to stone or plaster and found under the roofs of houses and galleries of minarets. These orna-



Mahala Fountain

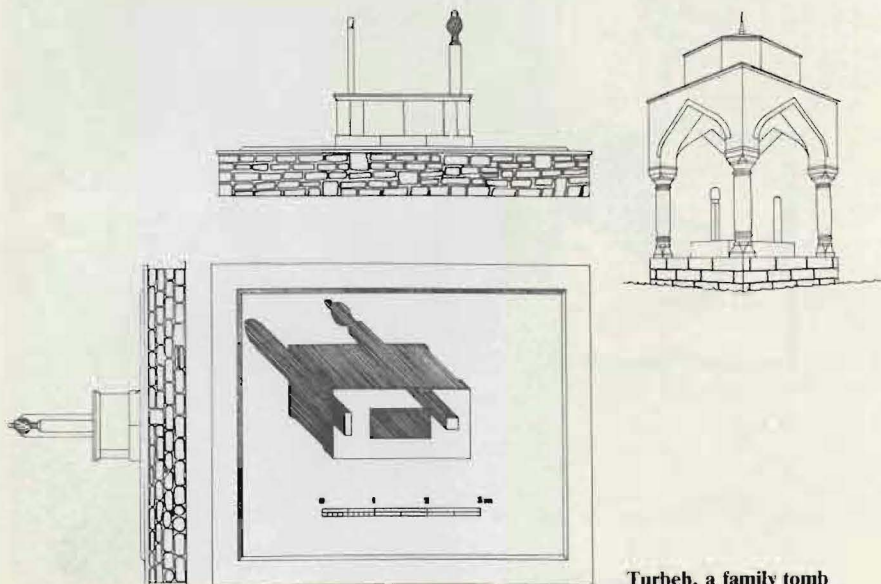




Burial chambers (turbehs) and tombstones on the cemetery of Alifakovac



Mihrab — altar niche determining the direction of prayer and culprit of Gazi Husrev Bey's Mosque in the Charshiya



Turbeh, a family tomb

ments look as if they were only embossed into the surface. From here there is only one step to the carved wooden cornices under the roofs so exquisitely set off from the whifewashed walls.

Side by side with this abstract plastic decoration go the carved ceilings and the various rugs with which floors are covered or walls hung.

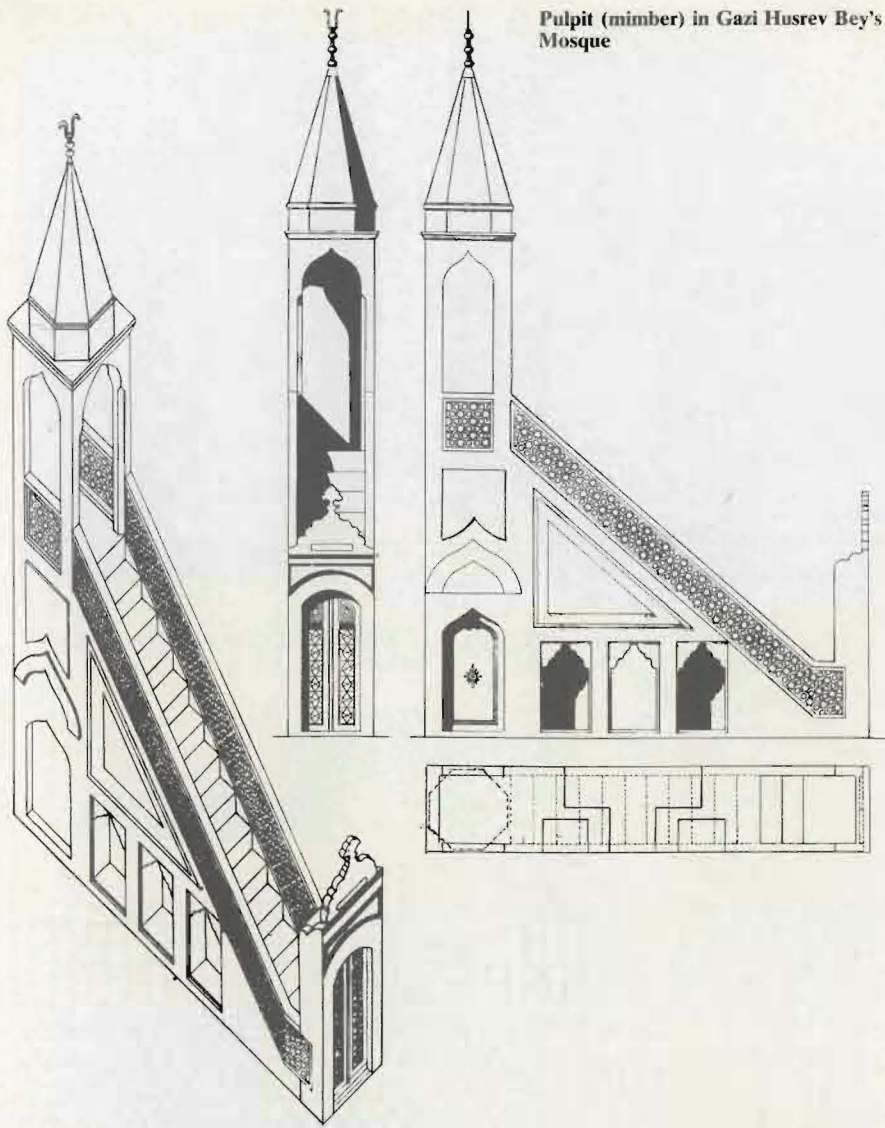
The ceiling is divided by narrow laths into geometrical patterns in the middle of which there is a carved rosette.

The prayer rugs usually represent a pavilion in a garden, while the other rugs represent the tree of life. Yet the pattern is often very abstract and geometrical in tints and forms.

Similar are the arabesques, schematized geometrical floral ornaments, the original flowers of which are no longer recognizable. Then there are inscriptions in Arabic representing true ornamental compositions.

Yet it must be pointed out that abstract ornaments are not at all characteristic for Bosnia. The arabesques found on wooden cornices show pure geometrical lines and the rugs display very sober and definite geometrical patterns.

Pulpit (mimber) in Gazi Husrev Bey's Mosque



When the Austrians occupied the country they made the mistake to seek in this architecture exotic features which it did not possess. They consequently built schools, town halls, railroad terminals and other public structures in a purely decorative style which has nothing to do with true indigenous architectural concepts.



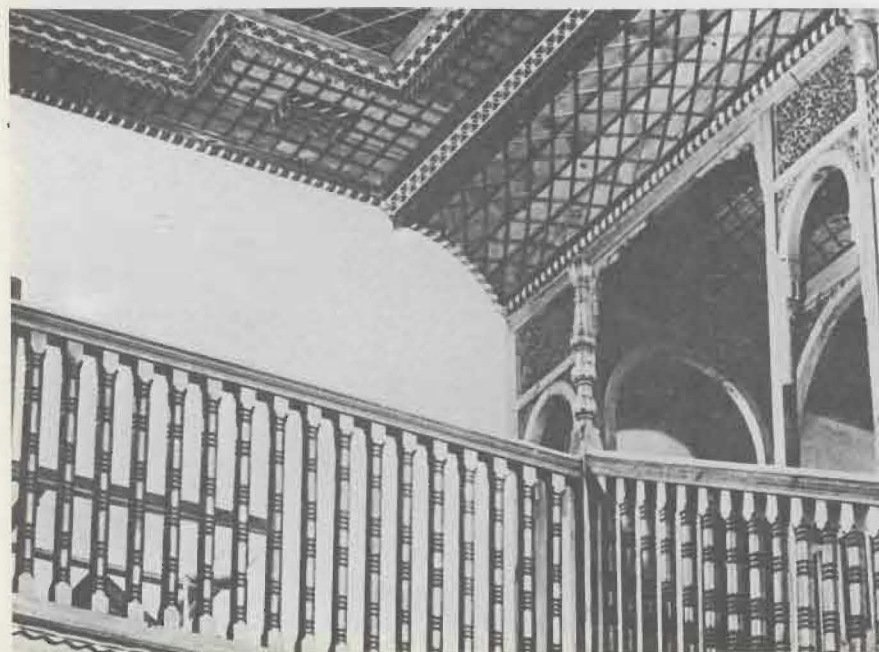
Gate of the Kurşumliya Moslem Divinity School



Wooden covered »šerefet«
— gallery of a minaret



Stone gallery of a minaret



Interior of a house

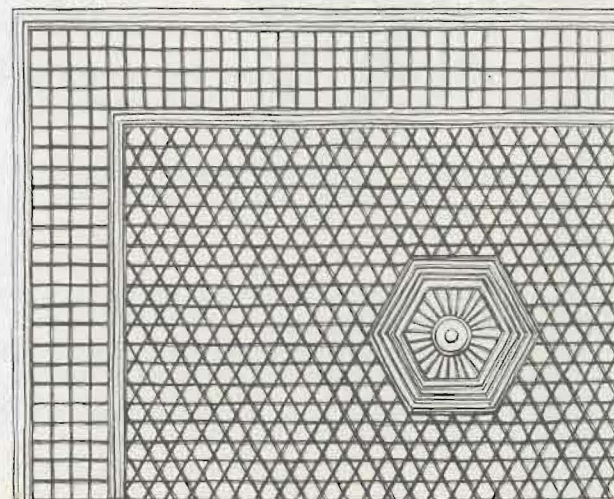


Serdžada — a prayer or wall carpet of
Moslems

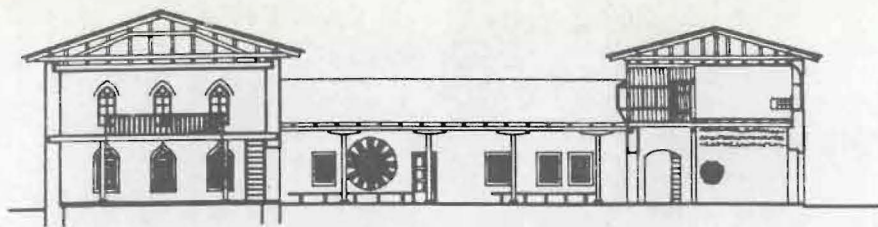


Ćilim — rug with a styled tree of life

Šise — carved ceiling
in the men's quarters
in Kozaračka Street



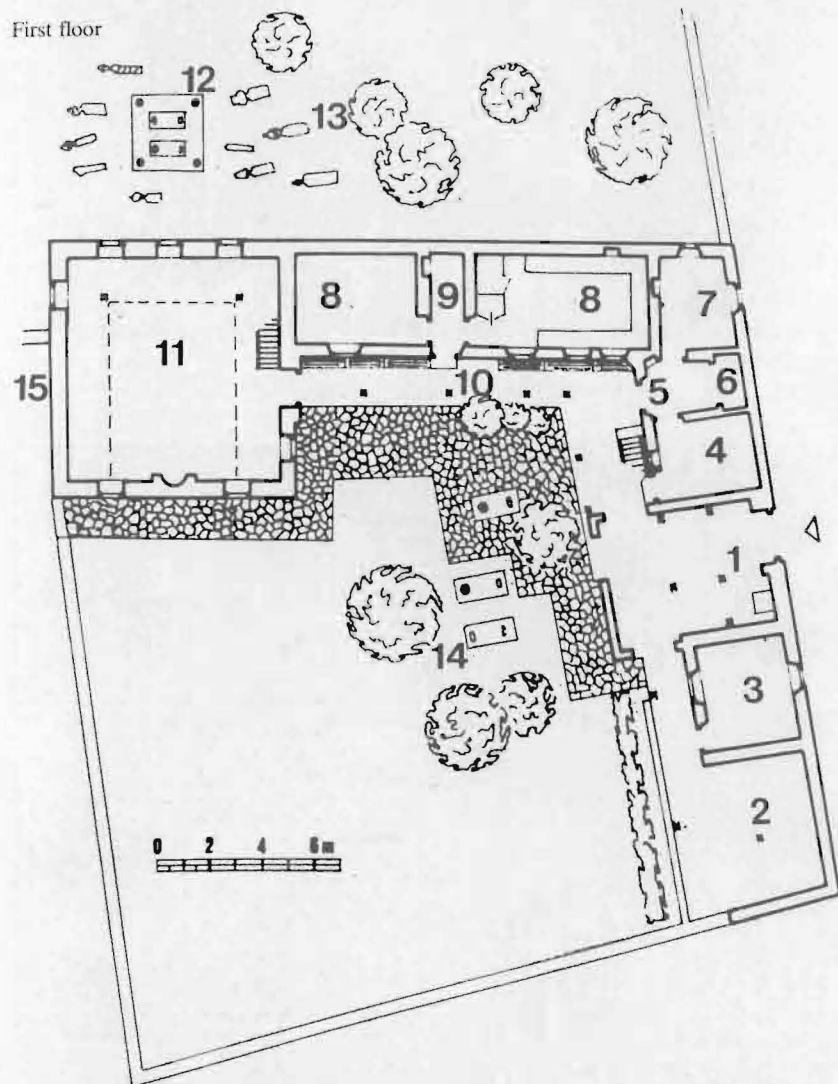
Cross section



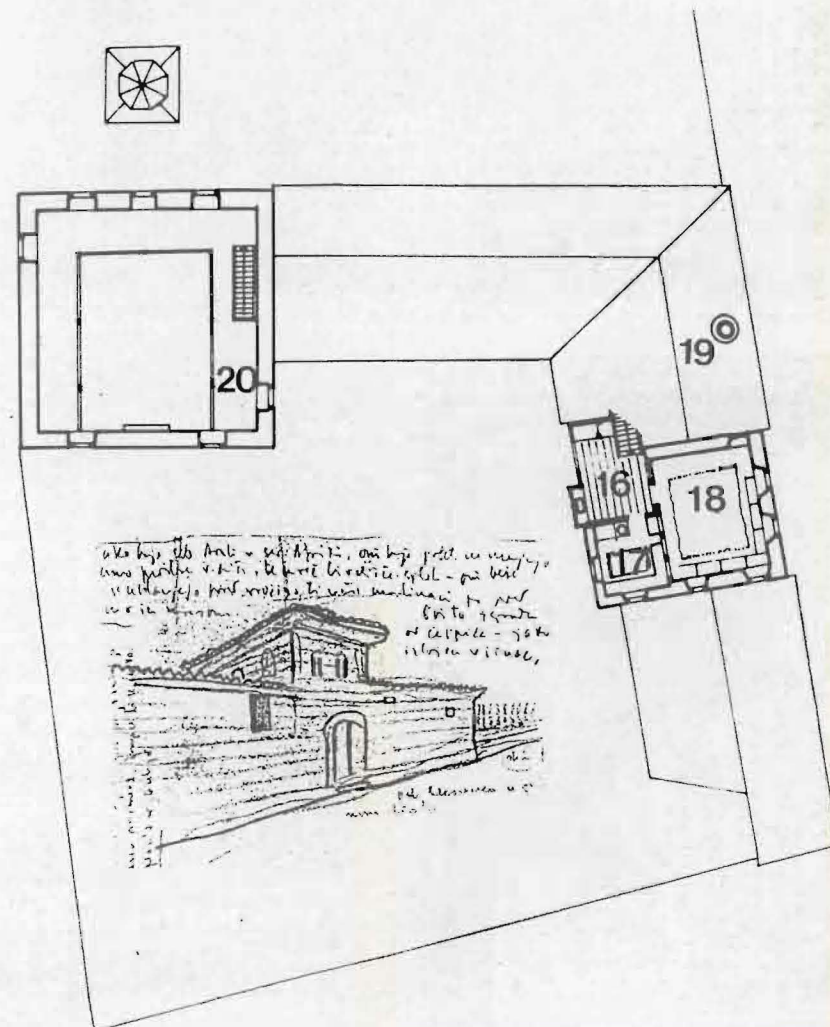
SINAN TEKİJA (MONASTERY)

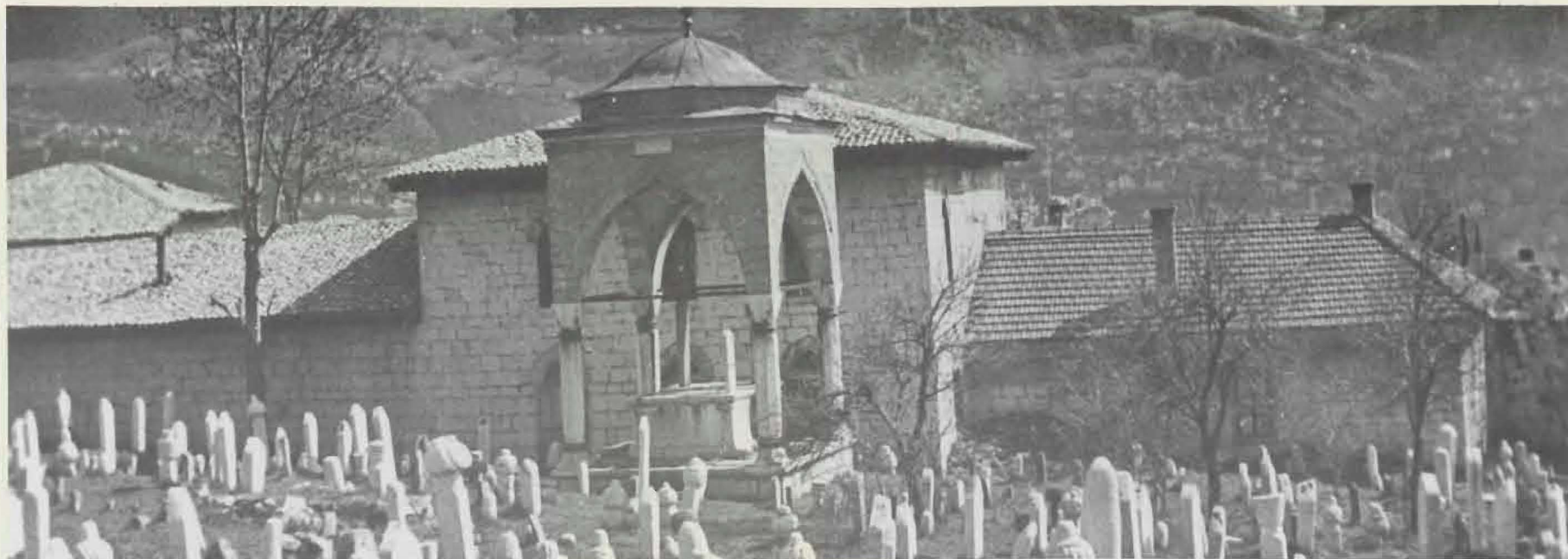
- | | | | |
|----|---|--------|---|
| 1 | entrance porch with fountain and wall inscription | 11 | mosque |
| 2 | utility porch | 12 | burial chamber |
| 3 | storehouse | 13 | cemetery |
| 4 | winter kitchen | 14 | courtyard and garden with graves |
| 5 | anteroom | 15 | annex |
| 6 | chimney | 16 | verandah with basin |
| 7 | storeroom | 17, 18 | sejh-head of monastery, dwelling |
| 8 | derviş — monks' room | 17 | small room |
| 9 | anteroom | 18 | room on upper floor |
| 10 | porch with a wall ornament | 19 | roof |
| | | 20 | Mosque's gallery with one piece staircase |

First floor

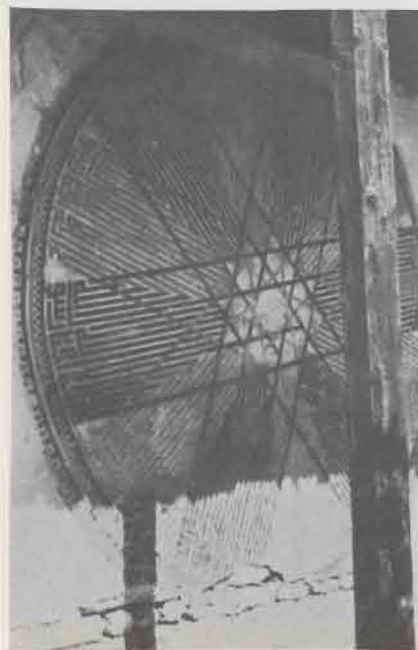


Second floor





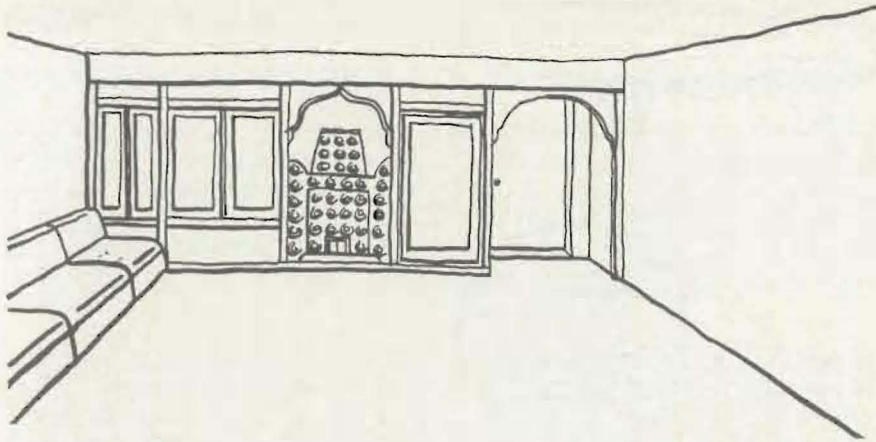
Cemetery with a burial chamber behind the Sinan Monastery



Wall ornament in the Sinan Monastery porch



Wall inscriptions in the Sinan Monastery porch



Partition wall along the entrance wall to the room and the bench with cushions along the wall

THE ORIENT

Ford was a sober man, his automobiles were one of the best. For fifteen years Ford cars came in one standard color — black. When some less orthodox automobile manufactures realized that the customers from the Orient wanted louder colors, they immediately tried to satisfy their desire. The demand for Ford automobiles began to decline. His sales managers, keenly aware of what the customers wanted, implored him to give his automobiles some louder paint. But Ford, a sober man who despised all showiness, said that he did not care what the customers from »the dirty Orient« wanted. Business became slack but H. Ford was stubborn — a true Gothic personality.

On the very brink of ruin, however, Ford finally gave in and began to turn out automobiles in lively colors. The dirty Orient carried the day. People were fed up with sober colors, they wanted something gay — and got it.



A firmly built-in bench with cushions near window

THE HOUSE WITHOUT FURNITURE

The furniture of the oriental house consists of a flour chest or hambar, a shelf or raf, a built-in wardrobe or dolaf, a low round table or siniya, a clothes box or sanduk, a built-in bench or sechiya, a partition wall or musandre with a chest for bedclothes, a stove, and a banyitsa.

The hambar, raf and dolaf are in the kitchen.

Among these pieces of furniture there is no regular table or chair. The siniya is a very low round board which usually hangs in the kitchen or the hayat, and is brought into the room only at mealtime.

There is no chair in the house because the Oriental relaxes squatting either on the floor or on the sechiya.

There is no clothespress because the male tenants fling their garments over a pole, called serg, placed under the ceiling of the divhana. Women keep their garments folded in sanduks.

Since the tenants sleep either on the floor or on the sechiya, there is no bed in the house.



Chest for precious articles

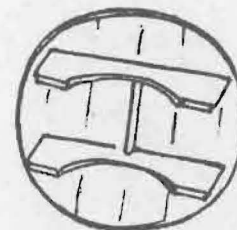
Thus the only pieces of furniture found in an oriental room are the sechiya and the musandra. The sechiya is attached to that wall which contains the window openings.

The musandra is a partition wall behind which there are usually a chest for bedclothes, a shower and a stove.

In summer when the tenants move to their summer living quarters, they take with them only a few spoons, knives, and pans nicely packed in a carpet. Nothing else is necessary because the house into which they move is already provided with everything.

As has been pointed out the Oriental squats on the floor. His horizon is for 45 cm lower than that of a European sitting on a chair. The floor of the room in which the Oriental squats, is covered with a rug. In order to keep the room clean and empty the sechiya and the musandra are placed at its circumference. Consequently the ceiling of the room can be lower than in European houses. Nevertheless, the room looks more spacious than the European which is usually crammed with all kinds of furniture.

Yet also in a modern European room the trend is felt to reduce furniture to a minimum — a bed, a wardrobe, a table, and a chair. Some people go even farther and have instead of beds couches which during the day can be used as settees.



Small low round table

The height of a table in a European house is 78 cm, and this is the level on which the European performs his work. The Oriental's horizon is much lower i. e. a little above the floor. The floor of the oriental room is covered with a rug because the tenants squat on it. We must ask ourselves whether the rugs on the floor of a European room are not somewhat misplaced, for they are either hidden under the furniture or exposed to dirt brought into the room from the street.

The modern European house is a place where work is done, while the oriental house is a place of leisure and recreation. The Oriental does all his work in the courtyard.

While on the one hand the modern European house approaches in respect to furniture the oriental house, we can observe on the other, that the modern Oriental has gradually introduced a chair and a table into his house.

GROWING BUILDINGS

The Coffeehouses of Sarajevo

The Oriental is fond of company and he dedicates much of his time to his friends and acquaintances. He also likes to drink a cup of coffee. Coffee quenches his thirst in summer, warms him in winter, refreshes him in the morning, and soothes him in the evening. The Oriental insists that coffee is a healthy beverage, and he seems to be right, for he does not appear to be nervous or fidgety. On the contrary, he is composed, calm, level headed.

Yet the Oriental is not quite happy if he does not smoke with his cup of coffee. There is no wonder then that there are so many coffeehouses in Sarajevo. Until recently there were about sixty coffeehouses in the charshija, and scores of them in the suburbs. Some keen observers discovered that every twentieth house was a café. Public houses were a rare occurrence in Sarajevo, and were found only in districts inhabited by Christians.

The oriental coffeehouse is a very simple affair. There are benches along the wall or dense rows of tables and chairs, a hearth with a shelf on which glittering pots and cup are displayed, rugs or straw mats on the floor. The ceiling is low and the whole structure is under a high Bosnian roof. This is the core of each oriental coffeehouse around which other pavilions were erected if it was necessary and feasible.

It seems that in the beginning the different pavilions were intended for different classes of patrons. A special pavilion was reserved for judges, one for professors, another for priests, one again for well-to-do citizens. Later, however, the pavilions were given different functions. Thus we have pavilions used as: coffeerooms, bars, cardrooms, kitchens, etc.

The pavilions rising around the central structure are nothing but gently inclined roofs resting on props, sheathed with clapboards and withewashed or enclosed with glass walls which in summer can be removed.

Such coffeehouses grow and decay like organic forms. We shall call such a growth around a core agglomeration which is basically different from that architecture which strictly conforms with the laws of symmetry and which, consequently, permits no additional structures and no modifications.

It is interesting to watch the life in such coffeehouses. There are no newspapers, and games have been introduced only recently. By and large, these cafés are rather quiet places of entertainment.

Upon entering the coffee room the patron sits down, lights a cigarette and patiently waits for the kafedjiya to come and take his orders. Coffee is

Situation of the cafés
along the Milyatska
River: the Babić Garden
(left) and Bendbaša
(right)



served in a small cooper coffeepot on a tray. Then there is a tiny cup, a glass of water and some sugar. Patrons sit over their coffee for hours on end. Conversation is subdued, dignified, slow. Often no word is spoken and yet the patrons do not seem to feel bored. They contemplate the surroundings, brood over some problem, or just watch the man at the next table. This kind of entertainment unknown to Europeans, is called merachenije. The coffeehouse in which the patrons can follow this inclination must be especially developed. It must have some attractive feature which usually results from its relationship to nature, environments, the life in the street, architecture, or the whole town.

Let us inspect some such cafés in detail:

BABICHA BASHCHA is a vast enclosed green platform located above the entrance to the town. At the far end of the platform are the coffee kitchen and the bar. Under the trees numerous pavilions and tables with benches are scattered. The best seats are those at the edge of the platform, for they command a fine view of the town and the Milyatska River.

CAFÉ HRID. It seems that originally this was nothing but a coffee kitchen at the far end of a green enclosed platform located high above the town. Later, however, a pavilion was erected at the edge of the platform. It is a long narrow open structure the roof of which rests on props. The tables and benches are placed like those of a dining car so that the patrons have a magnificent view of the town.



View of the Miljacka River bridges from the Babić Garden



A view from below of the both terraces of the Jekovac Café



A small café in Jekovac

CAFÉ YEKOVATS is built on narrow terraces above the town and opposite Babicha Bashcha. On the highest terrace are the coffee kitchen and the bar, on the lower terraces are closed and semiclosed pavilions while at the edge of the terraces are tables and benches from which fine views of the town can be obtained.

CAFÉ VRBANYA. It would seem that originally it consisted only of the coffee kitchen placed at right angles to the Milyatska River, and an enclosed space with willow trees in front. Later a pavilion and a platform resting on props were constructed over the river. On the platform are tables and chairs for those patrons who wish to relax in the shade of the willow trees.

CAFÉ BENDBASHA is located in a romantic gully between the river and the road leading to the town. It is just enough removed from the road that a triangular courtyard could be developed between the coffeehouse and the road. Toward the road the yard as closed with a high fence, toward the water and the neighbors with the two wings of the café. The two-storied wing over the water rests on piles. On the ground floor directly over the water is a terrace with tables and chairs, a room for the janitor, and the privies. On the first floor is again a terrace with a kitchen, bar, and coffeeroom. The other wing opens into the courtyard. In summer the glass wall between the wing and the yard, can be removed so that the two fuse into one space.

Façade



The Bendbaša Café (demolished)

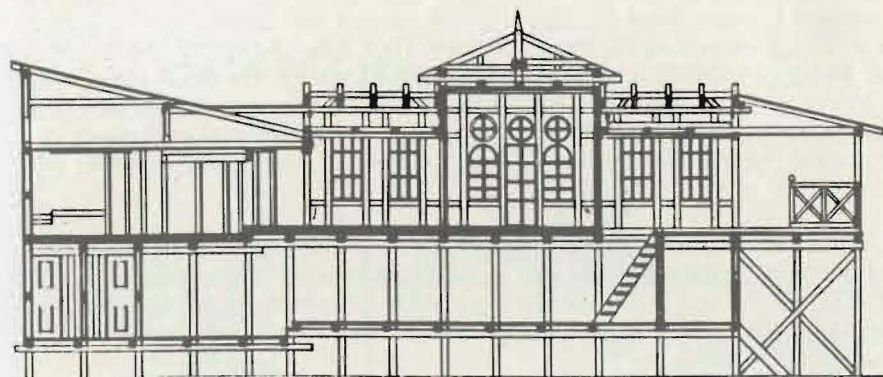
The core in the axis of the outer wing was constructed at a later time. It was designed by an Austrian architect as a frame house with a touch of the Baroque. But the original layout was planned so well that no structural alterations could spoil it.

CAFÉ STADION. Here it is also easy to discern the core i. e. the coffee kitchen which was placed on the free site opposite the railroad station. First a pavilion wing was added to each side along the street. Later the courtyard was developed and planted with trees. At the far end of the yard a kitchen and the janitor's house were erected. In summer the glass walls of the pavilion around the courtyard, can be removed so that here, too, the outer space merges with the interior into one single spatial unit.

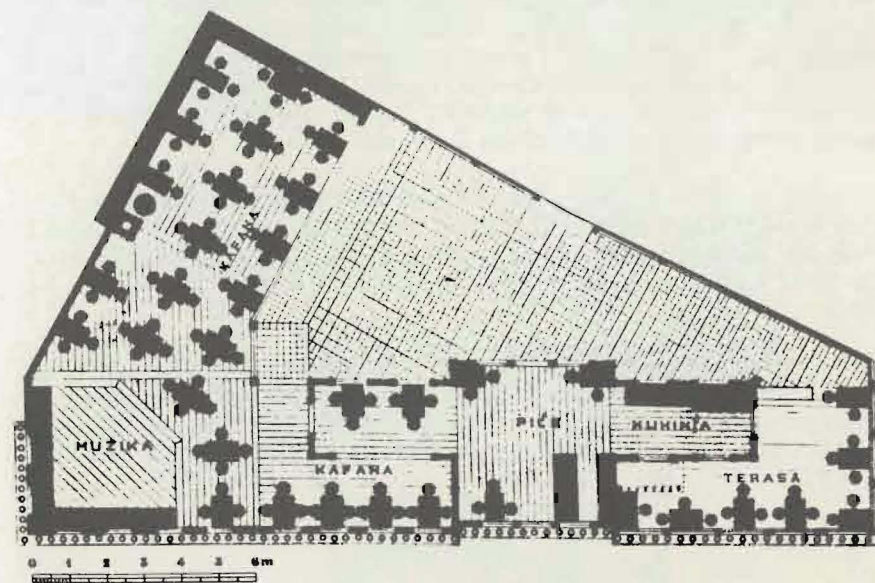
CAFÉ VOLGA. Originally the core seems to have been located in the center of the present layout. As time went on two wings and a roof between them, were added. Still later the kitchen, bar, and privies were transferred to the wing spreading along the street. Thus in the central structure a reading-, coffe-, card-, and billardroom were finally laid out. Into the narrow long wing facing the main street, a »railroad car« with tables and chairs, was incorporated. From it the street and the square in front, can be overlooked. Still later the square was transformed into a terrace, an awning put over the street, and a tree and vine planted on the terrace.

When eventually the streets were made wider the square and the coffee-house wings became narrower. Thus the structure continually changed not only its shape but also its size, and it is difficult to say in which phase of its development it was most attractive.

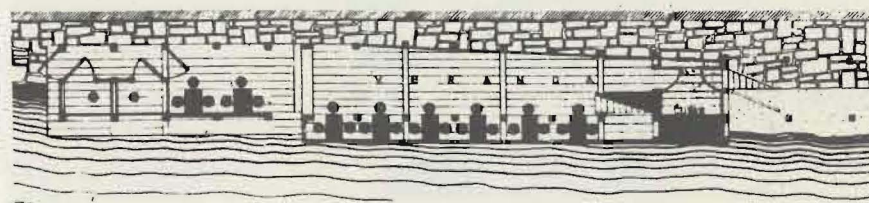
Cross section



Upper terrace, ground plan



Lower terrace along the Miljacka River, ground plan



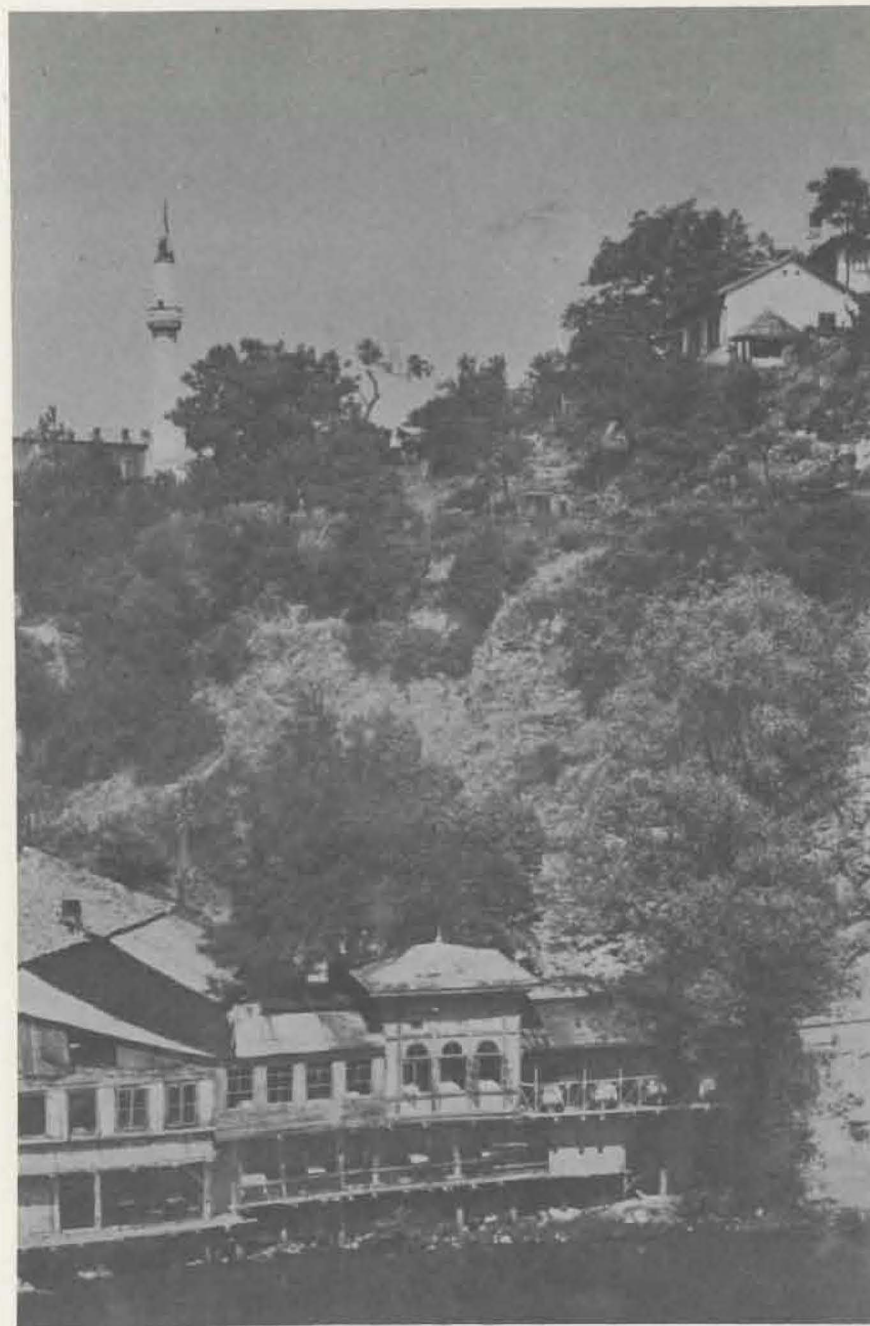
CAFÉ AEROPLAN. The coffee kitchen and the card room are on the first floor. They are accessible along very devious passages. The layout is complex and enclosed from all sides. Then the roof opens over the space over the stairs leading to the card room. Thus a small hypaethron is created through which one obtains a wonderful view of the clock tower, the minaret and the dome of Bey's mosque. Below is a courtyard which is used as a summer café. Thus when all hope to obtain a view is given up, the roof opens and forms a frame for the tall structures rising in the vicinity.

LABORERS' CAVÉ is on the ground floor of a two-storied corner house which opens on either side into dusty bleak streets. The interior is rather small. Yet the spatial pattern of the café is enhanced by the fact that the hearth on which coffee is prepared, stands right in the center of the room.

Sitting in one of these coffeehouses we cannot choose but contrast them with their European counterparts. Let us for a moment forget the high standard reflected in the furnishings of a European café here reduced to a few tables and chairs, let us also forget the highly developed technology reflected in the exceedingly complex construction of the European café, consisting here of nothing but a few props and partition walls covered with a roof, and let us examine the rich spatial pattern of the oriental café developed in spite of scanty technical means — and we shall become aware of the spatial poverty of the European café.

Here the structure is often worth no more than a couple of dollars and yet what a view does it command. It often consists of nothing but its position, while the European café with all its luxurious appointments languishes on the ground floor of some tall structure located in a narrow corridorlike street.

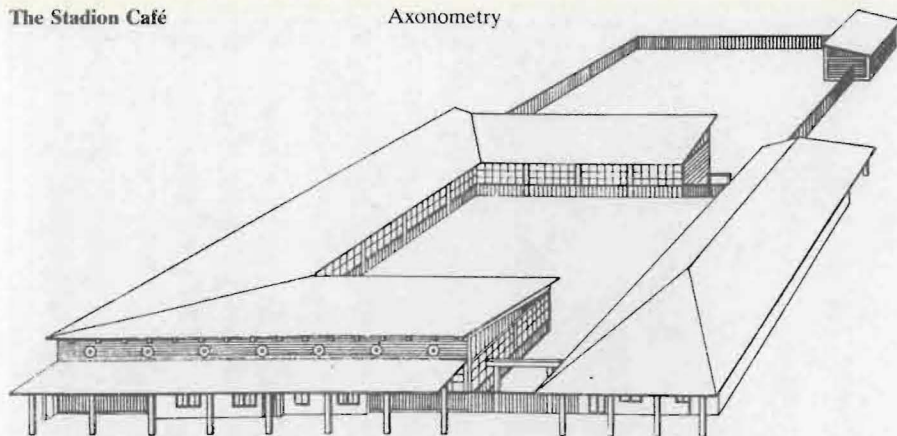
It is interesting to note that already in the year 1600 a Turkish historian saw in Sarajevo coffeehouses with five to ten different rooms or compartments. The first European café was opened in Paris in 1671, the next in Vienna in 1683. The latter was built to the pattern of Constantinople cafés.



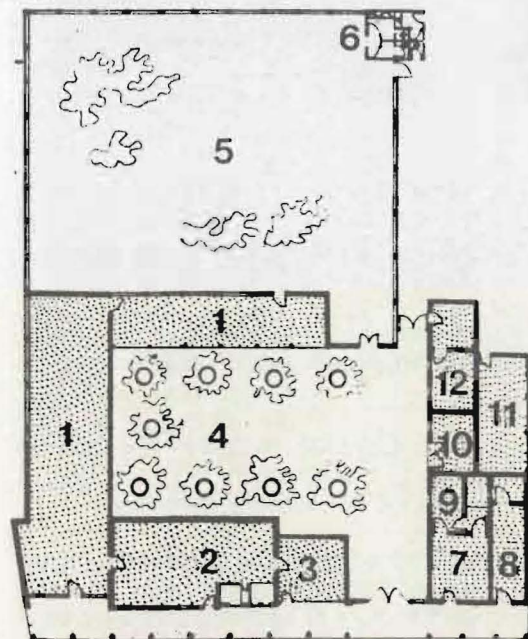
The Bendbaša Café along the Milyatska River

The Stadion Café

Axonometry

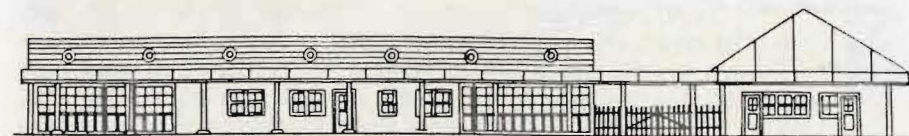


Ground plan



- 1 café
- 2 kitchen
- 3 café's private room
- 4 atrium with trees
- 5 garden
- 6 lavatories
- 7 tap-room
- 8 čevabdžinica — place where small grilled meat balls are made, eaten
- 9 private room
- 10 storeroom
- 11 shed
- 12 apartment

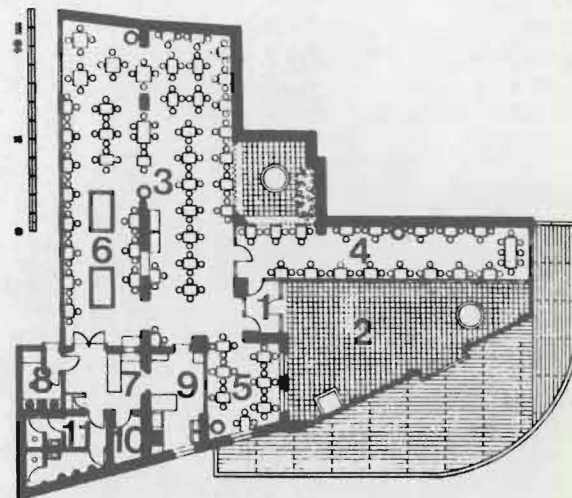
Façade



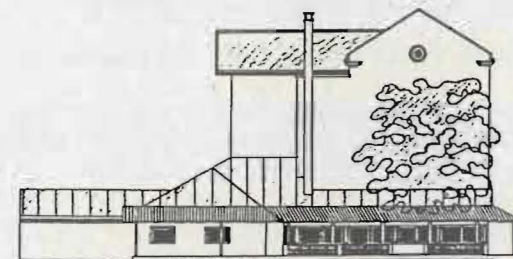
The Volga Café with a tree in atrium

Ground plan

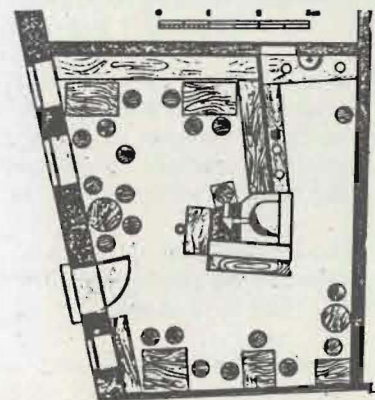
- 1 entrance
- 2 atrium
- 3 café room
- 4 café room
- 5 café room
- 6 café room
- 7 barroom
- 8 larder
- 9 kitchen
- 10 larder
- 11 lavatories



Façade



Ground plan



Laborers' Café in Circus Square (demolished)



The Bendbasa Café, the instance of a house which was additionally built and reconstructed

LAYOUT AND AGGLOMERATION

We do not know what to do with the ground plans of these structures: they have no proper axis and they afford us no approach to their essence.

Some investigators insist that they are the offspring of the Roman house, others again hold that they were built to the pattern of houses occurring in Alpine regions. What a misconception! The Alpine house started with a smoke chamber while the oriental house for a long time had no kitchen at all. We must again and again walk through these rooms in order to grasp their essence or else they will remain a sealed book to us.

European houses have an axis, some have even similar entrances in front and the rear, or the left side is equal to the right. Here, however, the entrances are evasive, do not lie in an axis. Originally, perhaps, the architect was led to such an arrangement by distrust, later by necessity, and finally by purely architectural considerations.

Walking through the house we come to rooms which are strung along our way like beads on a thread. As pointed out before the route through the house deserves to be called a »3 D way«.

The architectural features of this house seem primitive: the house is being continuously rebuilt, reconstructed, altered according to needs, wishes,

means, and other factors. We shall call it growing architecture because we can distinguish two kinds of architecture: one which is determined and complete from the outset and one which incessantly grows as pointed out above.

The oriental house grows around its core like a plant. Its core are a room and a hall. From this fundamental cell higher forms develop if necessity or ambition demand it.

Such are the Arabian mosques, the Egyptian temples, the modern houses, and such are also the cafés of Sarajevo which spring from a central structure and grow if means permit or necessity demands.

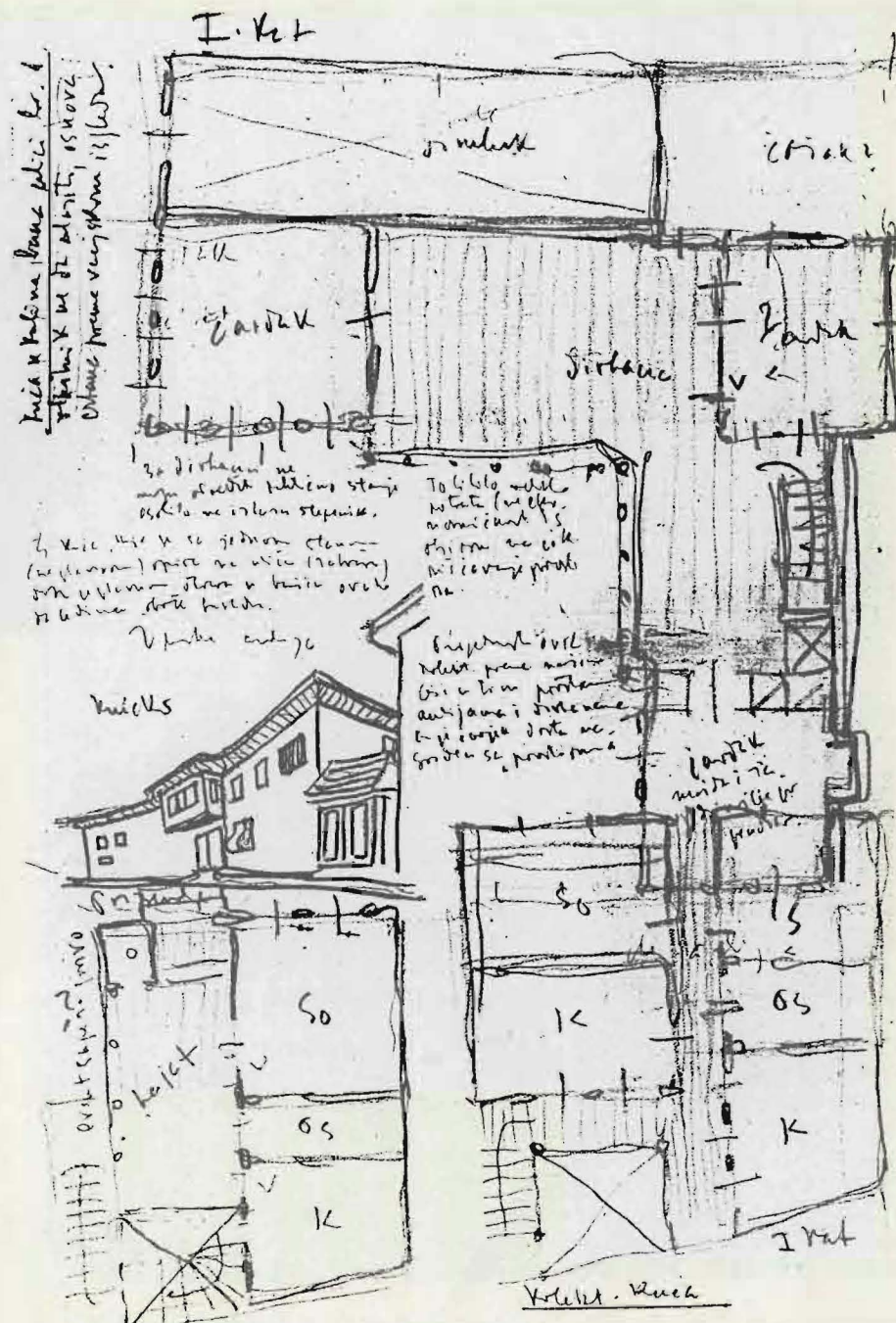
The buildings which grow are never finished, they can be always altered and it is difficult to say in which phase of their development they are most attractive. We shall call this art — »architecture of agglomerations« in contrast with planned architecture.

The Oriental does not make a definite final plan for his structure. On the contrary, he continually alters and modifies it in the manner of a mosaicist. And what else is this house it not a mosaic of rooms, halls, and corridors? »Thousand and one night« is nothing but a mosaic of tales held together by two central characters — the narrator and the listener. We could add or take away a score of tales without doing harm to its central



House from which a tree grows

make-up. The same applies to these architectural agglomerations. The alterations, however, are not restricted only to the annexes, the rooms can be equally treated: the living room can become a bedroom, a summer house can become winter living quarters, etc. The rooms are exceedingly flexible. We see that all architecture is permeated by the same spirit. There is something of the organic world in this architecture which grows and dies.





Horizontal layers of houses among green areas

RELATION TO NATURE

It has repeatedly been pointed out that the ancient oriental town-planner was deeply conscious of the nature amid which he was to develop human habitations. His comparison of the town with a living being is fully justified. When he insisted that a town should be located in a valley, that it should spread like an amphitheatre upon the surrounding slopes, that the road was the town's backbone, greenery its lungs, and water its soul, then he did nothing but voice a concept inherent in modern town-planning.

First of all the oriental architect was concerned with the problem of finding building materials that would blend with the surrounding nature. Consequently he chose those materials available on the spot. By doing so the oriental architect had gained an advantage over that majority of architects who at a later time utilized building materials that had nothing, however, to do with the natural setting of the building site.

Furthermore, the oriental architect took great pains to adapt his structures to the, by and large, horizontal landscape. He was extremely particular in the choice of the building sites and located his structures so carefully that they formed a harmonic whole with the landscape.

Having been very sensitive to the contour lines of the building site, he made his structures to hug the slope in such a manner that the develop-

ment looked as if consisting of layers piling one above the other. He carefully staggered the houses, thereby securing attractive vistas in great abundance.

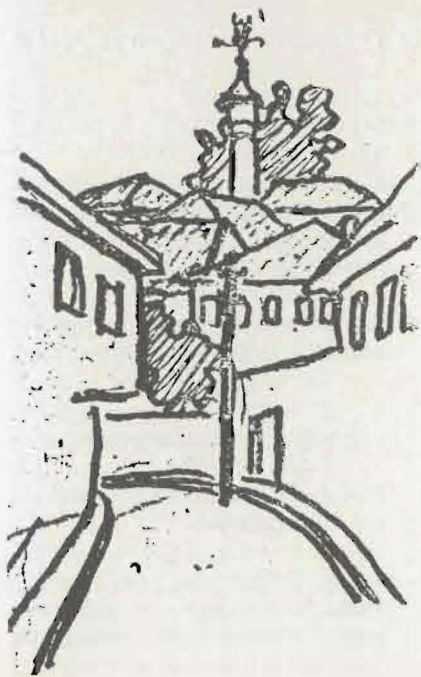
The streets were laid out in the form of a branching tree, and consisted of the backbone, transversal streets and blind alleys. This street system can be favorably compared with the modern systems of winding streets, and it certainly has an advantage over the corridorlike Renaissance streets, for it affords magnificent vistas of houses, gardens, minarets, trees and the town.

The attitude of the Oriental towards shrubs and trees was basically different from that of a Westerner of the past. The Oriental was deeply conscious of the role — vegetation plays in town-planning. He took great pains to preserve each single tree or shrub on the building sites.

A comparison of Sarajevo with any Western Renaissance city is very illustrative. While the architects of the latter concentrated all their imagination on the development of huge palaces, the Bosnian governor's residence in Sarajevo is no larger than the house of a well-to-do Italian merchant. But Sarajevo is dotted with gardens and green oases while the Renaissance city is nothing but a heap of stone.



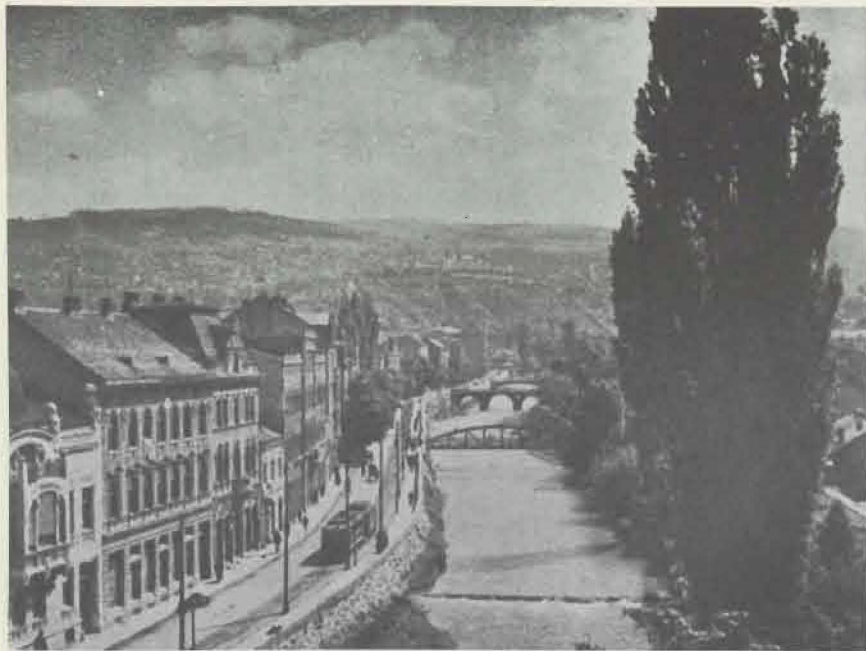
Houses on green slopes, adapted to the site



Short lane with a view of a minaret



Greenery in a harem — a courtyard in front of the mosque



Bridges across the Miljacka River (the 18th century)



As on the scene: a horizontal on arches, a poplar on each side, a minaret in between, layers of triangular roofs on the slope — Alifakovac and the Fortress on the hill



Kozja čuprija — Goat Bridge — a horizontal on the arch

It is interesting to note that the builder of a mosque was obliged to plant at least one tree near the structure.

And again, the oriental architect of Sarajevo did not only strive to create a relationship between building and site but he actually accentuated the intimacy between a structure and its natural setting. We have already discussed elsewhere in the present work the means by which he obtained this relationship.

Here only attention should be drawn to the Koziya Chuprija. Bridge located on the very border of the town. With its strong horizontal lines the bridge represents a demarcation line between the orderliness of the town and the surrounding wild landscape.

An other example of the relationship between the structures and the natural setting is the cobbled street rising gradually from the former Mortgage bank and terminating with a low long house and a poplar, and on the other side with a long doksat, a minaret and a poplar.

The poplars play an important role in the oriental architecture. Aspiring towards the sky they and the minarets break the sky line and represent vertical elements without which the otherwise horizontal lines would tire the eye. The relationship between the horizontal houses and vertical



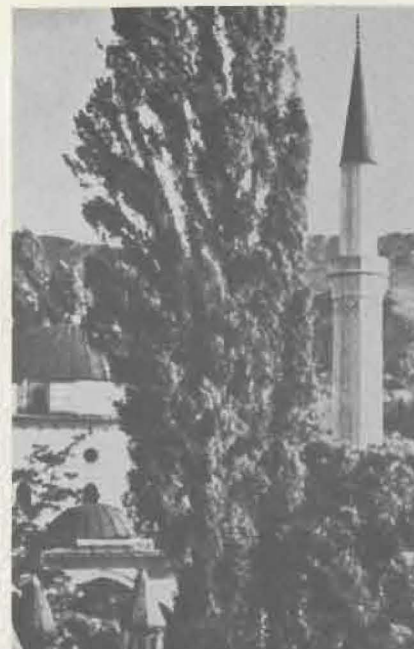
Bijela Tabija — White Fortress in a dominant position, a poplar is on each side of the bridge

poplars or other trees greatly contributes to the impression of spaciousness.

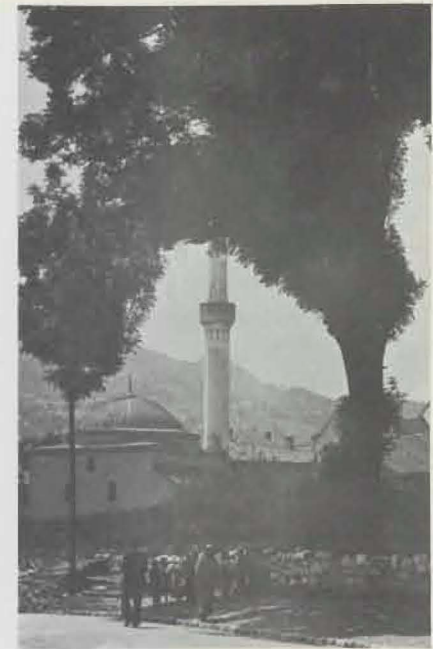
An other interesting instance of the relationship between the houses and nature represent the rows of windows, roof, doksats arrayed parallel with the contour lines of the slopes, horizontal lines broken by poplars, linden trees and shrubs of hundreds and hundreds of gardens.

Take, for example, Alifakovac: A slope of horizontal layers of triangular roofs, cubiform doksats and rectangular windows dotted with the green foliage of hundreds of trees. This mosaiclike pattern is suddenly interrupted by a horizontal line resting on arches — the bridge across the Miliyatska River with a poplar on either side and a minaret in the middle.

Another architectural element used to emphasize the relationship between the structure and nature was the fountain. An inhabitant of the desert is keenly alive to the question of water. Without it he is doomed to perish. Folk songs often deal with the subject of water, and the Turkish poet Nekresy calls the 16th century Sarajevo the town of thousand fountains. The French traveler Quiclet reported in 1658 that Sarajevo had 101 mosques and 110 fountains.

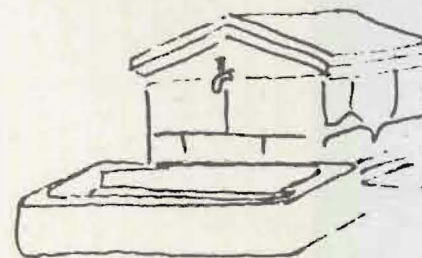


A poplar beside the dome and minaret

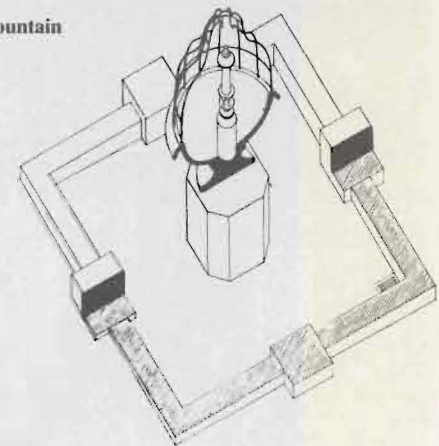


A lime-tree beside the minaret and the dome

Mahala Fountain



Fountain





Kiosk — Bendbaša Café
along the river



Kiosk — fountain



Promenade above the town, in the Polygon

As has been already pointed out the builder of a mosque was obliged to build a fountain near the structure. The majority of fountains is concentrated near the Moshchanitsa River which cooled the Charshiya during the hot summer month.

The fountain is an architectural element of the residential area. Consequently a great plastic emphasis is given to it. The fountain has in the Orient the same role as the monument has in the western city. The only difference is that the monuments represent living beings while the fountains are dead structures enlivened by an ever running, bubbling, whispering element—water.

Let us consider now the oriental habitation and its relation to nature. The habitation consists of the garden, fence and kiosk. It would seem that originally there was only fenced-in nature and that later a kiosk was added. A kiosk is nothing but a roof resting on slender pillars and floating over nature. It is possible that later again the kiosk was leaned against the house itself and that it became the divhana i. e. a bower for lodging in the open air. Still later the kameriya was developed in the divhana. The kameriya is a half closed space in which the family gathered after sundown. Thus we can see that these derivatives of the kiosk have never lost their contact with nature.



Walkers, male and female,
in the Poligon



Teferić — an excursion in
the open air

On our way through the town we encounter all kinds of kiosks: kiosk-house, kiosk-divhana, kiosk-fountain, kiosk-chadrvan, kiosk-tombstone, kiosk-coffeehouse, etc.

Every coffeehouse-kiosk is intimately connected with nature. Here space extends into the garden and walls of glass bring the view into the interior. Some coffeehouses are located in such a manner that the living space could be carried out over a stream, other are placed amid verdant gardens, and other again dominate the town from a lofty elevation.

There are numerous coffeehouses along the streets leading from the town to the surrounding slopes. Or the streets are laid out along the Miliyatska River.

Every Sunday large crowds of residents leave Sarajevo to spend the week-end between the town and Ilidje where they relax amid verdant groves and meadows.

Civilized man dazzled by neon signs, glittering shopwindows, has almost lost his contact with nature.

While the Oriental insists that wherever a house is built, trees should be planted, the Westerner has until recently felled them wherever he was building-up. During the last 50 years there seems to have been a compe-

titution among the mayors of Sarajevo as to whom would have more trees felled, more ancient jewels of architecture removed and who would succeed to transform the amphiteaterlike Sarajevo into a town of corridors.

BUILDING METHODS

One day the owner of the neighboring garden brought a carpenter to the site and told him to build-up a house.

They stopped on a spot where the ground sloped gently downwards. The carpenter had a look at the trees, the ground, the environments, and the town in the valley. Then he proceeded to extract from his cummerbund some pegs, paced off the distances, and marked them with the pegs.

Thus he came to his main task. He asked the owner which trees might be sacrificed, moved the pegs for a few feet, nodded and seemed satisfied. He found that the new house would not obstruct the view from the neighboring structures.

Then the carpenter reflected whether the new house would have enough light an sun. When he found that the east wall of the house would be far enough from the neighboring structure.

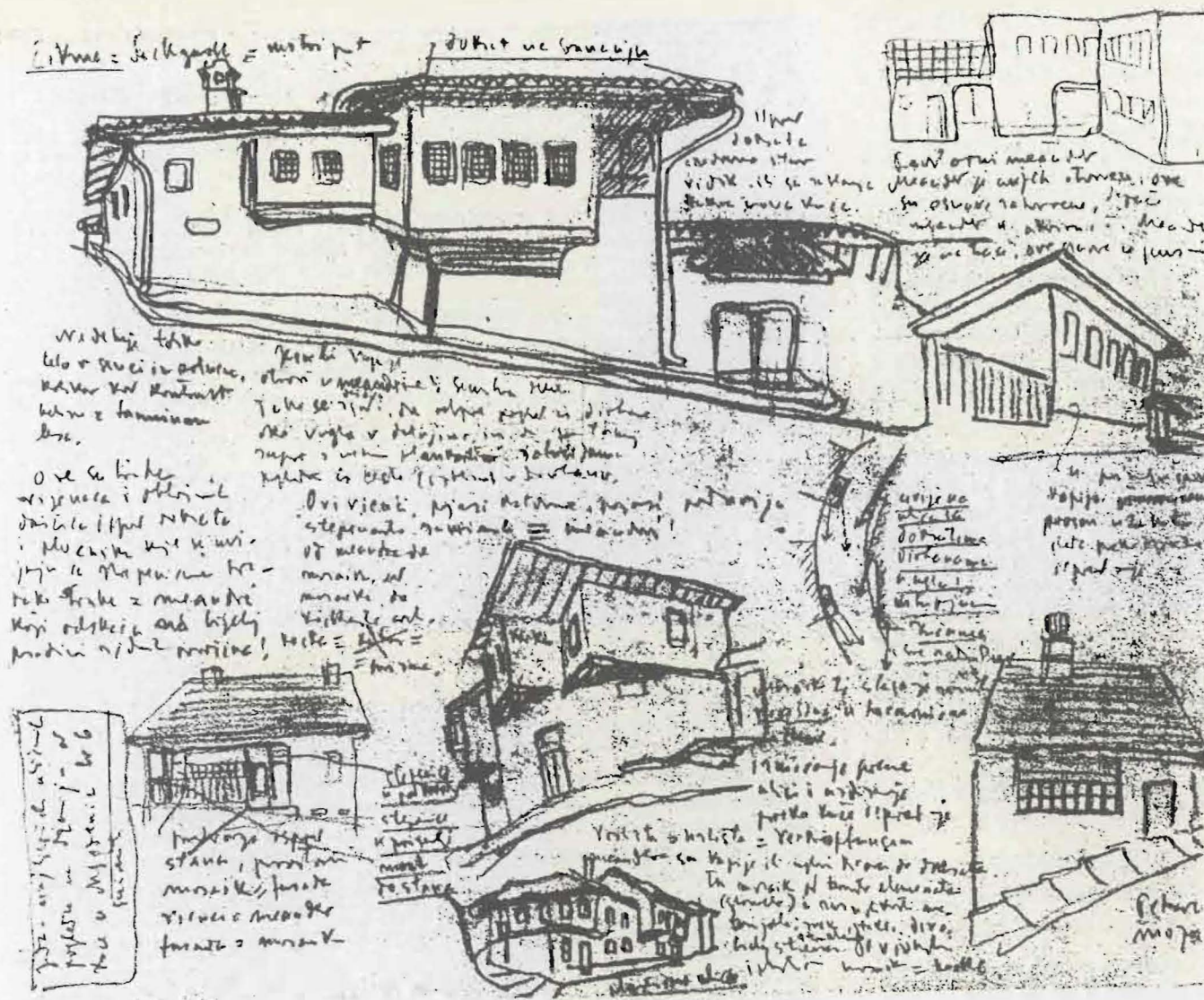
He proceeded to examine the site for water. There was a spring near by but the ground was inclined and he said that water would do no harm to the house. Having satisfied himself on all these points, he concluded his reasoning by saying that he was willing to erect the house.

In view of the above we must ask: what is the use of a drawing board?



Graves in a house garden

CONCLUSION



A sheet from the author's sketchbook

CONCLUSION

I.

The present book has been written with a view to show the way by which we could eventually arrive at our own new architecture.

In the chapters contained herein an attempt has been made to give an outline of the Bosnian heritage, and a description of the old architecture, the fundamental principles of which were unquestionably based on religious beliefs and feudal concepts. Furthermore, ways and means are discussed by which this architecture could free itself from the religious and feudal shackles in order to begin a new life of its own.

It has been repeatedly pointed out that religion and feudalism were the main sources upon which Bosnian architecture had drawn its concepts. It should be borne in mind, however, that both religion and feudalism were institutions devised for those who ruled — the feudal lord was allowed to exploit his serfs, the husband to enslave his wife. The sky in the Orient is not so serene and cloudless as some people assume. Many a traveller has portrayed the sombre aspects of the Orient, the still houses behind high walls and the lonely streets across which a muffled female figure occasionally skulks. We must not forget the bloody Turkish conquests, the wail of the subjugated people, and the din of battle fields. We must not forget that it was fear that had driven the Bosnians to accept the Islamic faith.

The late painter Roman Petrovic likened the Orient to an instrument on which the sweetest, as well as the harshest melodies are played.

Yet the aim of this book is not to show the gloomy side of the Orient but to invite the attention of the reader to the more humane aspects of its make-up.

If the oriental husband made his house a prison for his wife then he made it as a lovely, comfortable prison. On the first floor he built an airy veranda, the so-called divhana, and behind the house he laid out a garden which was as marvelous as a Persian rug.

The people's struggle for life, and the imprisoned, enslaved woman have left their imprint in this art.

Bosnia was repeatedly conquered, yet her people never gave way to despair. In spite of invasions, wars, intrigues, religious controversies, persecutions, and conflagrations the Bosnians continued to build and create. They never lost the sense for what was beautiful, noble, and lofty.

When at long last new vistas opened before the already drowsy eyes of the Bosnians, they swiftly came to, and started to remold their spiritual make-up as well as the environments in which they lived.

There are stages in the life of peoples, marked by indifference and inactivity, or enthusiasm and ardor. For centuries peoples sometimes seem to be struck blind until on a sudden they see again. And when a people once sees into the heart of things, then it begins to love or to hate — it becomes active.

The same is true for architecture. Everything that the man creates he tries to endow with beauty and meaning. Yet beauty must be seen. How many values and how much beauty perished because people did not grasp their meaning! The man often does not see things which other men saw hundred and hundred years ago. One of the tasks of socialism is to enlighten not only the individual but the whole people, and to make this people conscious of its potentialities.

II.

Now when the foundations of socialism have once been laid, new views, trends, aspirations, and ideas have begun to take shape. The feudal economy, religion, mysticism, idealism, and metaphysics were superseded by planned economy, dialectics, science, sociology, and education. The slogan is: industrialization; but not in the sense that the machine should enslave the man. On the contrary, it must help him. Mechanization, however, does not mean that man should be idle, it means that man and his machine should work side by side.

The new era molds new people and new ways of life. Now schools are being set up, education made free, the broad masses enlightened, veils behind which the Bosnian women hid their faces are being discarded and shutters flung open to admit sunshine into the gloomy rooms.

These are times of brotherhood and solidarity. The town has a monolithic make-up. There exist no longer separate residential areas for Muslims, Orthodox Christians and Catholics. Everywhere a trend toward equalization is felt. All activities are directed toward the attainment of a higher standard of living, the reconstruction of the town and the moulding of a harmonious spiritual make-up of the worker.

The town of domes, mosques and other specifically oriental features will become a town of paraboloids and parallelopipeds. The town of gardens, caravan roads, one-storied houses, artisans and merchants will become a town of parks, avenues and motor roads, tall buildings, workers and working »intelligentsia«. The number of inhabitants will rise from 50,000 to 300.000.

III.

The written laws superseded the unwritten laws.

Cultural institutions and housing districts are being built, and a new Bosnia is in the making.

It is true that reconstruction is only at its initial stage, and the work is far from being accomplished. At present the achievements are still primitive, embryonic and feeble. In the past Sarajevo had witnessed a golden age of architecture when during the rule of Husrev Bey building activities were stepped up to a maximum. Yet all those architectural achievements bear the stamp of Orient. Today, however, attempts are being made to express ideas in terms of the contemporary native socialist civilization on the threshold of which the country stands. People know what is bad, but they do not know what is good.

There is a host of good architects in the country. Some of them advocate contemporary views in architecture while other again show a predilection for classic means of expression. But there are few among them who are inclined to conform their architectural concepts to the old indigenous ideas. No wonder then that in discussing some controversial development plans many of them assume an I-don't-care-what-happens attitude. Yet does this attitude not show that they flee reality?

The time in which the man merely aspires to a shelter will sooner or later come to a close. This does unwritten law. Cultural institutions do not mean that he will demand luxuriously appointed houses, for material abundance is as harmful as penury. What will be demanded is a reasonably high standard of living and a house that would meet the requirements of the average man.

Contemporary architecture which draws upon old experiences cannot lead to disharmony. We do not see why the architect of today, before building a house, should not glance at the neighbor on the left and that on the right, and up to the green trees and the sun. We do not see why he should not draw upon tradition and its positive values, as well as on mechanization and modern technology. He should make an attempt to bring about a fusion of the Orient with the modern way of life. We must make use of the tradition; we must cling to our tradition, for only conti-

nuous development leads to new social ethics and new thought. At a time when many other nations have reached a deadlock in architecture, we can draw upon our medieval heritage.

We hear of architectural movements in Paris, Brazil, Sweden, all of which are based on architectural tradition. We hold that we are equally entitled to say a few words about the architecture of Bosnia, Macedonia or any other Balkan country, for we possess a vast and rich heritage. Furthermore, new artistic talents are being discovered every day in children, drawings which reveal a marvelous and intensive relation to man and nature. This is the link between the past and the present time.

GLOSSARY OF TURKISH WORDS (Borrowings)

- Abadžiluk — abáýjlook — tailors' quarter
 abdest — abdest — ablution before prayer
 abdesthana — ábdesthána — basin in the divhana
 aga — ágha — master, landowner
 ahar — áhar — stable
 ardija — árđya — backroom of a store
 aščija — áshshchiya — cook
 aščinica — áshchynytsa — public kitchen, small restaurant
 ašikovanje — áshikovanyeh — flirt(ing)
 ašik pendžer — áshik péndjer — flirt-window
 atari — ahtahree — druggists
 at — aht — horse
 at mejdan — aht meydahn — horse market
 atešluk — ahteshlook — fire-proof pots, pans
 ateštenemin — ahteshtenemin — fire-proof protective covering
 avlija — áhvleeya — courtyard, backyard
 badža — báhdjah — opening on roof (for smoke or light)
 barjaktar — báryaktar — flag bearer
 bajram — báhyrahm — Bairam, Moslem festival
 bakal — bákhahl — grocer
 bakrač — bákrach — copper kettle
 balija — báhlyah — commoner
 balkan — báhlkahn — mountain
 banjica — bánytsah — bath and lavatory in a room
 basamak — bahsáhmak — step; stairs
 bašča — báshshchah — garden
 baščaršija — báshshchárshiya — market place center of town
 bazar — báhzahr — bazaar, market place
 bazardžani — báhzahrdjahnee — merchants dealing in imported goods
 beg — beg — nobleman, bey
 bend — bend — dam, levee
 bezistan — bezístahn — covered market place
 birkatica — beérkahtytsah — frame wall
 boj — boy — floor, stor(e)y
 bojadžija — boyáhdjeeeah — painter
 bostan — bóstahn — melon patch, vegetable garden
 bošluk — bóshlook — room below the divhana
 bula — boolah — Moslem woman
 čardačič — chárdachich — small room on the upper floor
 čardak — chárdak — room on the upper floor, enclosed porch
 čardaklija — chardákliya — house with the upper floor overhanging the street
 čaršija — chárshiyah — business district, salespeople working therein
 čaša — chahssah — bowl, dish
 čebedjija — chebédiyah — blanket marker
 čefenak (čepenak) — chéfenahk — store shutters, shop door
 čenifa — cheneefah — lavatory, closet
 čef, za — zah chef — for pleasure
 čekmedže — chekmédjeh — jewel case with drawers
 čeremid — chéremid — roof tile
 čerpič — chérpitch — unbaked brick
 česma — chesma — (drinking) fountain
 čevabdžinica — čevábdjinitisah — place where small grilled meat balls are made, eaten
 čevapčiči — chevápchtichee — small grilled meat balls
 čibuklija — chiboókliyah — pipe maker
 čikma — chikmah — blind alley
 čilim — chillim — rug, carpet
 čirak — chirahk — candlestick
 čizmedžiluk — chismédjeelook — bootmakers' quarter
 čohadžija — chohádjya — drygoods merchant
 čor-sokak — chórsokahk — blind alley
 čošak — chóshahk — corner, chardak with windows overhanging the street
 čučar — chutchar — privy
 čul — chool — ashes
 čulhana (dimluk) — chooolhanah — place for keeping ashes
 čumez — choómez — hovel, hen-house
 čup — choop — jug, jar (for honey)
 čuprija — chóopriya — bridge
 čurčiluk — chóortchilook — furriers' quarter
 čusegija — chhooségija — coal shovel
 दौर — दौर — common storehouses
 demir — démeer — iron
 demirlija — demeériya — copper platter coated with zinc
 derviš — dervish — Moslem monk
 dimije — dímiye — pantaloons, trousers
 dimluk — dímluk — chimney
 divaniti — diváhniti — to talk
 divhana — divhána — verandah on the upper storey
 doksar — dóksar — second-floor porch, overhanging the street
 dolaf — dólaf — built-in wardrobe
 dućan — dóotchahn — store, shop
 dunder — jóonjer — carpenter
 dušek — dóoshek — mattress
 dušekluk — dooshéklook — box for bedding
 duvar — dóovahr — wall
 džamija — jáhmiya — mosque
 džebedžija — jebéjiya — ammunition marker and carrier
 dževdžir — jévjeer — strainer
 džezva — jézvah — pot for coffee-making
 džugumica — jóogoomitsa — brass water jug
 džugun — jóogoon — water pail
 džuma — jumah — payer held in mosques on Friday
 efendija — eféndiya — gentleman
 ekser — ékser — nail
 esnaf — ésnahf — guild
 feredža — feréjah — woman's outer dress, veil
 Frenk mahala — frenk mahálah — Catholic business district
 fildžan — filjahn — coffee cup, (china —)
 furuna — fóoroona — stove
 gazi — gahzee — conqueror (honorary title)

hafiz — háhfiz — learned man
(knowing the Koran)
haját — háhyaht — groundfloor
anteroom, vestibule
halači — háhlahchee — counterpane
makers
halvadžiluk — halváhjeelook —
confectioners' quarter
halvat — háhlvaht — basement,
groundfloor room
halvatič — hahlvatich — small
basement room next to kitchen
hamam — háhmam — Turkish
(steam) bath
hambar — háhmbahr — barn, granary,
chest for flour
hamurluk — hamoorlook — place in
bakery for kneading bread
han — hahn — hotel, tavern, inn
hanikah — háhneekah — monastery
hanuma — hahnóoma — wife, lady
harem — háhrem — courtyard in front
of a mosque
hasura — háhsoorah — doormat,
straw mat
hatula — hátoolah — beam, joist, shelf
built into a wall
hauz — háoos — pool (for ritual
washing)
hodža — hojah — Moslem priest
hudžera — hóojerah — storeroom

ibrik — ibrik — copper waterpot,
coffeepot
imam — éemahm — Moslem priest
imaret — eemaret — public kitchen
for the poor
ishodna kuča — íshodna koóchah —
summer house, weekend cottage

janičari — yáhnicharee — janissaries
jorgandžija — yorgánjija — quilt
maker

kadija — káhdijah — judge
kafedžija — kahféyah — café owner
kahvodžak — káhvojahk — hearth for
making coffee
kaldırma — kahldermah —
cobblestones, road paved with —
kamerija — kamériyah — raised part
of verandah

kantardžija — kahtárjija — weigher,
balance maker
kalaj — káhlahy — tin
kapak — káhpahk — lid, cover
kapakli — kahpáhkly — covered
kapakliavlija — kahpáhklyavlija —
covered courtyard
kapaluk — kahpáhlook — room in a
bathing establishment
kapija — káhpija — gate, entrance,
doorway
kapidžik — kahpijik — side door, side
gate; between women's courtyard
and garden
karavan saraj — kahrávvahn sáhrhay
— stopping place for caravans, with
rooms for guests, stables,
coffee-room
kasaba — kaksáhbah — provincial,
market town
kasap — káhsahp — butcher
kavodaja — kahvodayah — room for
drinking coffee
kazan — káhzahn — kettle
kazandžiluk — kahzáhnjeelook —
kettle makers' quarter
kazaz — káhzahz — silk weaver, lace
maker
kečedžija — ketchéjijah — artisan
making articles of cattle hair
kičma — kitchmah — backbone, spine
kiler — keeler — larder
komšija — kómshija — neighbor
komšimka — kómshimkah — gate
between adjacent gardens
kolčakdžija — koltchákiya —
upholsterer
konak-han — kónahk-hahn — inn for
overnight guests, with stable
koredžija — koréjija — cutler
krevet — krévet — store in front of
another one
kuba — kóobeh — cupola, dome
kubeli-bezistan — kóobely bezistaahn —
covered market place with dome
kujundžiluk — kooyoonyilook —
goldsmiths' (silver-)quarter
kulukčija — koolóokchiya —
swordmaker
kundurdžiluk — koondóorjilook —
shoemakers' quarter

kuplidže — kóoplija — small pot for
melting butter
kuzi tendžera — kóozee ténjerah —
pot for cooking mutton

latinluk — láhtinlook — Catholic
district
ledžen — lédjan — copper basin with
lid

magaza — mahgázah — warehouse,
store (house)
mahala — mahhálah — residential
district
mangala — mahngálah — brazier
maša — mahshah — kitchen shovel
medresa — medréssah — medresse,
Moslem divinity school
mejdan — máydahn — square, fair
ground; massage room in a bathing
establishment
mekteb — mékteb — Moslem primary
school
memiřhana — mémisháhnah —
lavatory
merak — mérahk — wish, pleasure,
enjoyment
meračenje — meráhchenya —
amusement, enjoying
meterisi — metereessee — pot for
carrying food
mesdžid — mesjid — a mahala
mosque
mihrab — mihrahb — altar niche
indicating the prayer direction
mimera — meemerah — pulpit
minaret — meenáhret — minaret, a
mosque spire
muderis — moodéris — teacher (in a
Moslem divinity school), professor
mudžolit — moojólit — bookbinder
mujezin — mooyézin — muezzin
musafirhana — moosáfeerháhnah —
inn for (free) overnight staying (for
poor travellers)
musandra — moosáhndrah —
partition wall
mušebak — mooshébahk — lattice
window-grille
mutabdžija — mootáhbjiya — artisan
making articles of goat hair
mutvak — móotvahk — kitchen

načve — nahchva — wooden
kneading trough
nakaš — náhkahsh — painter
nalbanta — nálbahntah — farrier
nanule — náhnoola — wooden
slippers
neimar — naymar — architect,
constructor
nišan — néeshahn — tombstone

odaja — ódayah — room, chamber
odunluk — odoonlook — wood shed
odžak — ójahk — chimney, hearth
oluk — ólook — gutter
oprkanj — óperkahn —
coppersmiths' quater

papučluk — pahpóochlook — place for
taking off slippers, shelf for slippers
paša — pahshah — lord, governor
pendžer — penjer — window
peškun — pěshkoon — round
decorated stool, chair

raf — rahf — shelf, drawer
raja — rahyah — rightless subjects
ramazan — rahmáhzahn — fasting
month, Ramadan

sadžak — sáhjahk — tripod cooking
stand, pan
sahát — sahhat — clock
sahat kula — sahhat koolah — clock
tower
sahara (sehara) — saháhrah —
clothes chest
samamluk — sahmáhmlook — hayloft
samardžija — sahmárjija —
packsaddle maker
sanduk — sándook — (clothes)
chest, trunk, box
sandukhana — sahindookhana —
dressing room
sandžak — sáhnjahk — district
sandžak beg — sáhnjahk beg —
district governor, district ruler
sarač — sáhrahtch — saddler
saračhana — sahrahchhána — place
for storing horse's harness, saddles
saraj — sárahý — court, palace
sečija — séchiya — built-in bench with
cushions; settee

sebilj, sibilj — sebil, sibil — covered fountain
 selamluk — seláhmlook — men's part of a house
 serg — sehr — horizontal pole under the ceiling for hanging men's clothes
 simahana — seemahhannah — hall for religious services
 sinija — séeneeiya — low round table

sofa — sawfah — (garden) bower
 sofrá — sofrá — dining-table
 sokak — sawkahk — street, lane
 solunar — solunahr — sheet-iron smoke pipe
 spahija — spáhhiya — landowner, knight
 susak — soossahk — water jug

šadrvan, šedrvan — sháhdervahn — water fountain, anteroom in a bathing establishment

šeher — sheher — town
 šehid — shehid — the man fallen for Moslem faith
 šeih — sheih — head of a monastery
 šerdžada — sharejahdah — wall rug, prayer mat
 šerefa — shárefah — gallery on a minaret
 šiše — sheeshe — ceiling

tabak (plu. tabaci) — tahbahk — tanner; skinner
 tabak — tahbahk — tray
 tabakhana — tahbahkhannah — tannery
 tabija — tahbiya — part of a fortress
 tahmis — tahmis — monopoly of roasting coffee, place for roasting coffee
 tahta — tahtah — plank, board
 tahtapoš — tahtahposh — shelf for chine near stairs

taraba — táhrahbah — fence
 tarakčija — tahráhkchiya — barber
 tašlihan — táshlyhahn — hotel, inn built of stone
 tava — tahvah — baking dish, frying pan
 teferič — teférich — picnic, excursion
 teferičiti — teferichihtih — to enjoy a picnic, an excursion
 tekija — téhkiya — dervish monastery
 tekne — tekneh — trough
 tendžera — ténjehrah — copper pot
 tenečedžija — tehnehchéjiya — tinker
 tepsija — tepsiya — copper pan, casserole; tray for pastry
 terezije — tehréhziyeh — balance, scales
 terzija — térziyah — tailor
 testa — testah — road
 testija — téstiya — earthenware water jug
 tufegdžija — toofégjiya — gunsmith

tor — tor — pen, fold
 trem — trem — porch, doorway, cloister
 turbe — toorbeh — burial chamber, mausoleum

vaukf — váhkoof — (church) foundation, endowment
 vakuf-nama (vakfija) — váhkoof, vahkfiya — treasury
 val(a) — vah(ah) — veil (for hiding women's faces in the street)
 valija — váhliya — governor of a province
 varoš — váhrosh — town
 vilajet — viláet — province, district

zar — zahr — women's long hooded overdress
 zildžija — ziljiya — artisan making brass articles
 zvekir — zvekheer — door-knocker

For the purpose of making the pronunciation of some words (names of persons, places, rivers, mountains, etc.) easier, and correct, they have not been written in their original, correct Serbo-Croatian spelling, but in the one to suit English readers.

FOR PRONUNCIATION

Alifakovac — Alifakovats

Babića Bašča — Babicha Bashcha
 Bendbaša — Bendbasha
 Brodac — Brodets

Careva ćuprija — Tsareva chupriya

Čurčića brijeg — Churchitsa Briyeg

Kafana Jekovac — Café Yekovats
 Kafana Vrbanja — Café Vrbanya
 Kozja Ćuprija — Kozya Chupriya
 Koševo — Koshevo
 Krajina — Krahyeena
 Kuršumlija — Koorshumliya

Miljacka — Milyatska
 Mokranjska planina — Mokranya Mountain

Morića han — Moricha Han
 Mošćanica — Moschanitsa

Nadkovači — Nadkovachee

Piruša — Pirusha

Ploča — Plocha

Sandak — Sandjak
 Stara varoš — Stara Varosh

Širokac — Shirokats
 Širokača — Shirokacha

Tašlihan — Tashihan
 Trebević — Trebevich

Zagraci — Zagratsi

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10.	H. Kreševljaković	Vodovodi i gradnja na vodi u starom Sarajevu (Water Pipes and Building on the Water in Old Sarajevo)	Izdanje Gradske štedionice grada Sarajeva	1939
11.	B. Kuripešić	Putopis kroz Bosnu, Srbiju, Bugarsku i Rumeliju 1530 (Travels Through Bosnia, Serbia, Bulgaria, and Rumelia, 1530)	»Svjetlost« Sarajevo	1950
12.	Pospišil	Monatshefte, f.	Städtebau, 6—7	1416
14.	V. Skarić	Postanak Sarajeva u XV i XVI stoljeću (Formation of Sarajevo in the 15th and 16th Centuries)	Glasnik Zem. muzeja, Sarajevo	1929
13.	V. Skarić	Jedan slovenski uzor bos. mramora (A Slav Pattern of Bosnian Marble)	Glasnik Zem. muzeja, Sarajevo	1936
15.	V. Skarić	Sarajevo i njegova okolina (Sarajevo and Its Surroundings)	Izdanje opštine Sarajevo	1937
16.	A. Solovjev	Nastanak bogumilstva i islamizacije Bosne (Origin of Bogomilism and Islamization of Bosnia)	Godišnjak Istor. društva BiH	1949
17.	Dr. Č. Truhelka	Gazi Husrevbeg (Gazi Husrev Bey)	Glasnik Zem. Muzeja BiH, Sarajevo	1912

Dušan Grabrijan

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Dušan Grabrijan

Slovene architect, pedagogue, scientist, and publicist. He graduated from Prof. Jože Plečnik's department in Ljubljana, in 1924. As a first scholarship-holder from his School, he then carried on his postgraduate studies at the Ecole des Beaux Arts in Paris. After his return, he was first employed with the Building Authority of Ljubljana and then in Sarajevo. In the year 1930 already he passed to the Technical Secondary School of Sarajevo working as a teacher until 1945 when he returned to Ljubljana. At the Faculty of Architecture, Civil Engineering and Geodesy he was an associate professor holding lectures on two subjects: The Bases of Projecting and the History of Architecture, until his unexpected death in 1952.

Until the year 1937 Grabrijan was preparing projects and participating in competitions, afterwards he devoted himself to pedagogical, scientific and professional publicity work. He wrote 78 articles, published in the professional magazines and in the daily press in Sarajevo, Zagreb, Belgrade, and Ljubljana. Among them were also polemic articles dealing with the town-planning problems of Sarajevo in connection

with the projects prepared by J. Neidhardt, and in connection with the projects and their realization of J. Plečnik in Ljubljana.

He was a great admirer of Plečnik and, at the same time, a seeker after new roads in architecture. He was in favor of the new ideas propagated by A. Loos, Le Corbusier, Fr. Wright, A. Aalto. And in Sarajevo, he found in the old Moslem architecture points of contact with Le Corbusier's theory and architecture, and later on so, to an even greater extent, in the Macedonian house. The texts already prepared and illustrations collected in his inheritance have made possible the posthumous publication of the five books with translations.

As a fighter having a liking for modern architecture, he was creatively, from a point of view of a contemporary architect, discovering our architectural heritage. His motto was: "WE MUST PROCEED FROM OUR NATIVE LAND AND TAKE INTO CONSIDERATION THE ACHIEVEMENTS OF CONTEMPORARY ARCHITECTURE."

The rich illustrations from his sketchbooks and albums of his heritage supplement in an excellent way his texts where he made attempts at the presenting the ethical, functional and space qualities of the old Moslem house, aiming at transferring them to our contemporary building. Through his architect's experience he, thus, enriched also the view of architecture pertaining to the history of art.